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THE UNIVERSITY OF ALBERTA  
SELF-DISCLOSURE AS PERSONALIZED RISK TAKING IN  
SENSITIVITY TRAINING

by  
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A THESIS  
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
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DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read,  
and recommend to the Faculty of Graduate Studies for  
acceptance, a thesis entitled "Self-Disclosure as  
Personalized Risk Taking in Sensitivity Training,"  
submitted by Alvin Glen Scott in partial fulfilment  
of the requirements for the degree of Doctor of  
Philosophy.



## ABSTRACT

This study was designed to determine if a shift in risk taking attitude could be produced by exposure to sensitivity training and in this manner test the information exchange hypothesis as an explanation of the risky-shift phenomenon. It was postulated that self-disclosure, in a sensitivity training group, would constitute a behavioural form of risk taking. The second major focus of the study was upon the effect of sensitivity training upon self-disclosure rate and certain specified personality characteristics.

Ninety-three education undergraduate volunteers were randomly assigned to three experimental conditions in a pre-test posttest control group model. Seventy-two subjects completed the project which took place over an eight week period. Twenty-six subjects (9 male, 17 female) attended twenty-five hours of sensitivity training in three separate groups. Twenty-five subjects (8 male, 17 female) composed the control group while twenty-one subjects (10 male, 11 female) made up the three groups designed to demonstrate the risky-shift phenomenon as classically produced using non consensus directions. The data collected were used to test eleven hypotheses developed from theoretical considerations relevant to the areas of cognitive risk taking and sensitivity training group functioning.





A risky-shift was produced by means of the classical non consensus discussion method. Sensitivity training produced a shift in risk taking attitude which did not reach statistical significance. An alternative to the cultural value of risk explanation of the risky-shift phenomenon is offered in terms of group formation theory. The results suggest that a measure of risk taking should be taken early in the inclusion phase of group development rather than after the group terminates. A small but significant positive correlation was found between amount of self-disclosure to the female friend target and low risk taking attitude implying that self-disclosure to female friends is not regarded as being risky. Marital and sex differences were noted.

Sensitivity training produced a significant increase in self-disclosure rate to male and female friend targets. This finding is discussed in terms of the value and efficacy of sensitivity training procedures.

High test anxious subjects were found to be significantly higher risk takers than low test anxious subjects particularly on the dimension of debilitating test anxiety. Sex differences were noted with respect to the relationship of manifest anxiety to risk taking attitude.

Defensiveness did not exert any statistically significant effect upon either risk taking attitude or self-disclosure rate. Sensitivity training did not have



any statistically significant effect upon defensiveness as operationally defined. The results suggest that the operational concept of defensiveness is in need of further clarifying research.

Sensitivity training did not reduce the reported intimacy value of topics initially judged to be of a highly intimate nature. Self-disclosure of intimate material may produce a greater willingness to disclose same, but does not exert any statistically significant effect upon the value assigned to a topic in terms of its intimacy level.

Ancillary findings concerning the use of achievement anxiety scales are discussed in terms of their significance for future research.



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## CHAPTER I

### INTRODUCTION AND PROBLEM

Group sensitivity training has been described as a therapeutic vehicle having equal applicability to people with and without specific behavior disorders insofar as it is oriented towards greater self-enhancement for the participants (Lakin and Carson, 1966). Self-enhancement, as personal growth, is reflected in a person's increased spontaneity, capacity to feel and to express feeling directly and creatively. The terms sensitivity training group and encounter group are used synonymously by Schutz (1967) to describe groups that are oriented towards individual growth and development.

Sensitivity training must be subjected to experimental study so that its importance is not mythically maintained by cult supporting believers. It is anecdotally reported by people who have experienced sensitivity training that they have learned something about themselves, or that they have changed in some manner as a result of the experience. Often they can neither explain nor describe what it was about the experience that influenced them, but suggest that one must participate in the experience in order to know what they mean. Comments are frequently made about being authentic, genuine, disclosing one's real self, or becoming real. Related to the reported belief of sensitivity training participants that the value of the experience centres upon



self-disclosure, is Jourard's (1964) comment that "...it seems to be true that those people who have 'been' and disclosed themselves most fully to another person are most able to acknowledge and diagnose their inner experience." [p. 103] For Jourard (1959), self-disclosure is the act of letting another person know what you think, feel or want, and as such is the most direct means by which an individual can make himself known to another person. Former training participants often refer to daring to be one's self, fearing one's real self, and the risks of self-disclosure. Jourard (1964) summarizes this feeling by stating that "...all forms of authentic disclosure of experience, entails risk." [p.41]

Being yourself in the presence of others involves taking chances. Honest disclosure of feelings and thoughts about oneself and others carries with it the risk of dependency or rejection. The expression of positive affection and its acceptance can produce dependency just as open description of the negative aspects of a relationship risks rejection and hurt. Experiencing the joy of being aware of feelings and open to their expression is described by Schutz (1967) as being worth the risk involved.

Initially the members of a sensitivity training group experience considerable discomfort as they become acquainted and develop trust relationships which will eventually enable some of them to disclose significant aspects of themselves.







As a group develops and matures, individuals who have not risked self-disclosure begin to do so. This behavioural change could reflect a shift in their attitude towards risk taking and the development of a willingness to display how "risky" they are to the other group members. It is therefore assumed that individual differences in risk taking attitude (Kogan and Wallach, 1964) determine the manner in which a person discloses himself in sensitivity training.

Statement of personal opinion and the expression of both positive and negative feelings can be taken as demonstrable evidence of self-disclosure taking place in sensitivity training. Self-disclosure was postulated to provide the information exchange about personal risk taking attitudes between group members. The problem was to demonstrate a shift in risk taking attitude as a natural outgrowth of self-disclosure in sensitivity training sessions rather than as in the experimentally contrived laboratory situations designed to demonstrate this effect.

## I. STATEMENT OF PURPOSE

This investigation was designed to determine if self-disclosure in a sensitivity training situation would constitute the necessary information exchange prerequisite to the production of the risky-shift phenomenon as described by Stoner (1961).



The standard method of studying the risky-shift phenomenon consists of two steps. The subjects are initially asked to make individual decisions about a series of twelve problems on the Choice Dilemmas Procedure (CDP) (Kogan and Wallach, 1964) in which it is possible to take greater or less risk. They are then placed in a group situation where they discuss the same problems and may or may not reach a consensus of opinion. They then answer the same twelve problems. The difference between the mean individual level of risk and their later group mean level of risk is referred to as a "shift." A change towards greater risk is termed a "risky-shift."

The greatest majority of research in the area of risk taking has been conducted using American university students, specifically from the eastern United States, as subjects. It was therefore necessary to demonstrate that the Kogan and Wallach (1964) procedure for producing the risky-shift phenomenon was applicable to the sample used in this study. Part of the sample was randomly selected to demonstrate this phenomenon. It was hypothesized that a risky-shift would be produced. The major focus of the study was upon the production of the risky-shift, as measured by the CDP, as a result of group sensitivity training with its emphasis upon self-disclosure. An effort was made to determine if the risky-shift phenomenon, as measured by the CDP, is only an artifact of an experimental situation or whether it could be demonstrated to occur in natural situations, as it should if Brown (1965),



Teger and Pruitt (1967), and most recently Wallach and Wing (1968) are correct in describing risk taking as a cultural value. The occurrence of a risky-shift in a natural group process setting, as opposed to a laboratory experiment, should constitute the necessary condition for testing Brown's (1965), value of risk theory as an explanation of the risky-shift phenomenon (Stoner, 1961).

Given that risk taking attitude may be significantly related to self-disclosure in a group situation (Jourard, 1964), of equal importance is the discovery of relationships between certain specified personality characteristics and self-disclosing tendencies in an encounter situation. If a high level of self-disclosure is related to healthiness of personality (Jourard, 1959), then an increase in self-disclosure rate should be a concomitant goal with self-enhancement in sensitivity training. It is therefore critical to obtain the description of personality variables with which the self-disclosure rate varies and which vary with a person's attitude towards risk taking.

Of all the personality characteristics found to be significantly related to risk taking attitude and tendencies, test taking anxiety and defensiveness have the most generality through various situations (Kogan and Wallach, 1967c). High anxious, low defensive subjects are found to be disposed towards greater risk taking than low anxious, high defensive subjects who demonstrate a tendency towards conservatism rather than riskiness. Similarly, West (1968) demonstrated





a positive significant relationship between anxiety and self-disclosure to same-sexed friends for adolescent girls ( $p. < .01$ ) and boys ( $p. < .05$ ). He interpreted his findings as suggesting that anxious adolescents tend toward high self-disclosure or, alternatively, that high self-disclosure to friends is associated with high anxiety.

In view of the nature of the present study, it was necessary to obtain measures of defensiveness, test anxiety, and manifest anxiety as a means of describing the sample, as well as to relate them to the measures of self-disclosure and risk taking. It was important to determine if these personality characteristics, which have a demonstrated effect upon measures of risk taking and self-disclosure also exert their modifying effect in the sensitivity training situation. The Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960) was used to classify individuals as being high or low defensive; the Achievement Anxiety Test (Alpert and Haber, 1960), and the Bendig (1956) short form of the Taylor Manifest Anxiety Scale were used to describe the anxiety variable.

### Summary

This research project was designed to first of all, demonstrate the risky-shift phenomenon as classically produced; secondly, to determine if the information exchange which takes place as a result of self-disclosure in sensitivity training sessions would also produce the risky-shift effect;





and thirdly, to study the effects of test anxiety, manifest anxiety, and defensiveness as they are related to self-disclosure and risk taking attitudes in a sample of University of Alberta undergraduate education students.

## II. THE IMPORTANCE OF THE STUDY

The basic finding in risk taking research has been that, at a decision making level, groups tend not to be typically cautious as was popularly believed (Stoner, 1961), but in fact tend to endorse greater riskiness than individuals do. This has important consequences in the fields of business management, the treatment of juvenile gangs, mob and crowd panic management as well as in the whole area of mental health. It is important to further delineate the factors which apparently effect this change in an attitude at the group level.

Many theories of counseling are based upon the need for the counselee to disclose more of himself, to the counselor specifically and to other people in general, with the ultimate goal being a more healthy growing personality. Self-disclosure is described by Jourard (1959) as being both descriptive of a healthy personality and the means by which a healthy personality is achieved. Schutz (1967) believes that the use of encounter groups is the means by which man can realize his potential. By becoming "realized" Schutz means that a man becomes and continues to become a more significant, competent and lovable person, a more



meaningful individual, capable of effectively coping with the world and better able to offer and to receive love.

As mentioned previously, the efficacy of sensitivity training must be scientifically demonstrated if its advocates are not to be solely mythically supporting cultists. The rapid proliferation of group process institutes, weekend communication workshops, human relation training institutes, marathon sensitivity training sessions and perhaps more critically the involvement of untrained or poorly trained group leaders demands that the scientific community accept the responsibility of developing instruments designed to evaluate the total process and its outcomes. The recent movement of educators into the area of affective education (Borton, 1969) in an effort to deal more effectively with student's feelings makes the study of sensitivity training of paramount importance for educational psychologists. Borton indicated that schools may soon be using sensitivity training techniques to teach children to evaluate and guide their own psychological growth, how to increase their motivation to achieve, or perhaps how to express their aggressive feelings in non-violent ways. Since sensitivity training sessions focus upon self-disclosure in the here-and-now situation the study of self-disclosure in this situation is of considerable importance. It is critical to describe the personality characteristics which moderate risk taking attitude and the self-disclosure rates in order that group situations



can be structured and facilitated so that the desired effects are obtained and, perhaps of more importance, that undesirable effects such as debilitating emotional upheaval (Drotning, 1966), may be prevented.





## CHAPTER II

### REVIEW OF THE LITERATURE

Two lines of psychological theory converge in this investigation. First, the study concerns the cognitive area of small group decision making as it relates to risk taking attitude. Secondly, it raises the question of whether the self-disclosure that takes place in sensitivity training is risk taking and an example of the type of personal information exchange required to cause a person to contribute to the shift in risk taking attitude previously reported (Stoner, 1961; Hinds, 1962; Kogan and Wallach, 1964, 1967a; Brown, 1965; and Teger and Pruitt, 1967) to occur as a result of discussion of material that can elicit risky choices of actions.

Group sensitivity training is based upon the assumptions that normal people are capable of becoming more fully functioning personalities, desire change, and will grow under appropriate conditions. The challenge for psychology, according to Izard (1965), is to discover the conditions under which this growth can take place and to develop an adequate theory of effective personal growth. If self-disclosure is the means by which one grows and develops in a healthy manner, and also entails risk as Jourard (1964) suggests, then the study of self-disclosure as a form of personalized risk taking appears to be a valid place to commence answering the challenge for adequate theory.





## I. THE GROUP MOVEMENT

The behavioural sciences and particularly humanistic psychology are becoming increasingly more group oriented in their efforts to bring about individual and cultural changes. This trend is becoming of increasing importance as man faces the impending crisis of loss of personal and social identity as a result of the rapid technological advances being made in our society.

Man as a gregarious being will need to improve his social functioning as a result of the rapid decrease in the size of the known world. Living in closer contact with his fellow man demands increased development of skills in interpersonal reactivity. The challenge for the behavioural sciences and particularly humanistic psychology lies in the discovery of methods whereby man can learn to overcome his feelings of powerlessness due to cybernation. Cybernated man must develop the necessary skills to reappraise himself and his peers as worthwhile individuals able to effectively live in close proximity to each other without the loss of personal identity.

Man does not live in isolation, but grows and develops through the media of his interpersonal interactions. It follows that efforts to remedy, modify, eradicate or enhance aspects of any individual's manner of living could be profitably directed into the group context.



Historically, psychology and psychiatry have been initially concerned with aberrant behavior and its modification and control. The knowledge accumulated about the development of abnormal behaviour has gradually been extrapolated to explain the behaviour patterns of the more normally functioning person. The same history applies to the development of the group influence. Meiers (1946), borrowing from an early statement by Ebbinghaus, describes group psychotherapy as having "...a long Past but a short History." [p. 4], a statement having equal applicability to the human relations group movement. The cults and religions, the folklore, the folk tales and the poetry of the ancients as well as the history of our own early North American inhabitants provide us with the roots to the past developments of group living, group psychotherapy, and the infant development of human relations training in general and sensitivity training in particular. J.H. Pratt, a physician treating tubercular patients in 1906, and J.L. Moreno, a physician treating emotionally disturbed adolescents by use of drama groups in about 1908, are generally credited (Meiers, 1956; Gazda, 1968) with being the formal initiators of group psychotherapy.

It is not the purpose of this paper to survey the development of group psychotherapy but, suffice it to say that at a conference for inter-group relations workers (Miles, 1962) interested in group functioning, a concept was





developed which reached fruition at Bethel, Maine in 1947 when the National Training Laboratory System was founded.

The National Training Laboratory System has become known for its use of the training laboratory as an educational technique. Batchelder and Hardy (1968) currently define this rapidly developing system of human development as follows:

A training laboratory (lab) is an educational strategy which attempts to create a situation in which the participants, through their own initiative and control, but with access to skilled professional leadership and new knowledge, can evaluate their old attitudes and behavior patterns and explore new ones.

...

The assumption of the laboratory method is that skills in human interactions are best learned through processes of participation in which the learner is involved. The training activities, therefore, are social process events in which the trainees are invited to participate, and then to reflect upon their patterns of participation.... A variety of specific activities or components, of which sensitivity training is only one, might comprise any specific training laboratory. [pp.121-122]

Similarly no attempt is being made at clarification or resolution of the controversy concerning the similarities and differences between group psychotherapy and group sensitivity training. Batchelder and Hardy (1968) provide as clear a distinction between what has become known as a conventional therapy group and a sensitivity training group as is currently available.

A therapy group, typically, is one which deals with unconscious motivations, uses clinical constructs, focuses upon past personal history rather than the present 'here and now' of the group, and is guided in these activities by a professional therapist....



A sensitivity training group, in contrast, is characterized by the following:

- (1) It is intended for participants who are essentially healthy and normal functioning individuals, people whose internal conflicts and defenses are low enough that they can learn from each other without first having to participate in the activities which constitute conventional therapy.
- (2) It uses relatively nonclinical concepts and theory.
- (3) It focuses upon relatively conscious material, rather than on unconscious motivations.
- (4) It focuses upon the 'here and now' instead of upon past personal history. (The most relevant data for the group are experiences the members are having in common within the life of the group, and these are not dependent upon the revelation of personal past histories of the members. This means that the material on which the group has primary focus is generated during the life span of the group by the group and its members, and would include such things as present feelings and perceptions about self, about other members of the group, or about the group itself.)
- (5) It functions in ways to utilize the resources of all of the members of the group, rather than depending largely upon the trainer. (In contrast to therapy groups, which can never escape all that is implied in the patient-therapist relationship, the sensitivity training group norm is that it is not just the trainer who has wisdom and resource. If the group is to progress, members must accept the responsibility for helping each other. The group truly functions as a result of all of its members, the trainer included.)
- (6) It accomplishes its goals within a relatively short period of time. (In contrast to the months and even years which may be involved in psychoanalysis or group therapy, a sensitivity training group within a laboratory almost always ends its existence within three weeks or less.) [pp.115-116]

Presently two major lines of development exist in group human relations theory, the original National Training Laboratory System and the experimental experiential workshops of Esalen, in Big Sur, California.

The National Training Laboratory (NTL) system is a more cognitively oriented program with emphasis being placed upon





such objectives as: (1) increasing sensitivity to human relations situations particularly as it is related to the development of observational and analytical skills; (2) increasing ability to diagnose group situational problems with the emphasis upon improving operating skills within the group context; (3) provision of theoretical knowledge as a basis for the learning of sensitivity and the diagnostic skills; (4) provision of an opportunity for the participant to try out newly learned skills in the group context; and (5) the opportunity to try to relate the new experiences to the back home situation. An Adult Education Association Leadership pamphlet (1959) describes the NTL training methods as being:

...based upon analysis of experiences, integrated with research and theoretical knowledge, [to assist the delegate]...gain new insights and attitudes, develop dimensions along which to examine all future human relations situations, and gain understanding of his own motivation and the effects of his own behavior on others. [p.4]

Wallen<sup>1</sup>, a National Training Laboratory Associate, describes the objectives of a laboratory in interpersonal relations as follows:

1. To increase each person's understanding of...
  - a...ways he sends messages of which he is not aware--how others see his actions differently than he sees them.
  - b...messages he responds to that others did not send--how he tends to misread other people's actions.

---

1. Personal Communication John L. Wallen, Northwest Regional Educational Laboratory; Portland, Oregon.



c...how feelings influence behaviour--his own as well as others'.

d...his silent assumptions (those he has been unaware of) that give rise to his feelings about other people's actions.

e...his typical style of responding to conflict situations.

2. To increase each person's skills in...

a...understanding others' feelings and ideas. Using skillful checking responses to decrease damaging misunderstandings.

b...communicating his own feelings and ideas in ways that are maximally informing and minimally hurtful to others.

c...dealing with conflict and misunderstanding.

It can be seen from these objectives that an approach with a basis in learning theory and psychological principles can be used to eventuate the desired behavioural modification. Considerable emphasis is placed by Wallen upon cognitive understanding of whatever takes place in the group proceedings. Brammer and Shostrom (1968) describe the sensitivity training group as providing:

...an opportunity to experience yourself more fully in your relations with others - to discover at a deeper, more intensive level, what you and others are thinking and feeling, to learn how people relate to each other and how you in turn relate to them. [p. 326]

As with Wallen, the value of constructive openness to one's feelings is not underestimated but is placed in the perspective of not being an end in itself but only a means to describe a given situation and to build better relationships. This is somewhat contrary to the Esalen, sensory re-awakening approach to personal self-development.

A comprehensive accurate description of the Esalen approach is difficult to formulate due to the lack of





scientific writing about the program. Murphy (1967) acknowledges that most of the workshops are experimental and experiential with the primary area of exploration being the affective domain, although interest is also expressed in the cognitive area. The goal of the program is to "...try to expand human consciousness and help people 'turn on' without drugs or alcohol." [p.36] In keeping with the philosophy of Esalen that each individual be allowed to "do his thing" it is necessary to describe the program as a conglomerate of devotees of a particular school of thought working towards the development of their particular systems for personal self-enhancement and extended human growth.

Perls (1951) worked within a group structure to try to make each individual aware of inner body factors which may be interfering with his growth as a totally functioning person. Maturation is viewed, in Gestalt Therapy terms, as a continuous growth process in which a person mobilizes and learns to use his own resources. Attention is focused upon learning to differentiate the myriad of feelings which are not in awareness and therefore not understandable. When an individual is aware of what he is perceiving and his senses are attuned then he is able to rely more upon his own resources.

Gunther (1968), another resident at Esalen, as a teacher of body awareness believes that desensitization caused by



excessive muscular tension is central to most peoples problems. Sensory awakening, through relaxation and a variety of sense stimulating exercises, is the process that leads to heightened awareness, contact with oneself and real experience and is the means by which Gunther believes that people become more fully functioning.

Encounter groups are the medium in which Schutz (1967) uses psychodrama, fantasy, body awareness exercises and confrontation to assist participants in developing more effective interpersonal behaviour. Schutz's goal is described by Murphy (1967) as being:

...to amplify feelings and to help turn suspicious, hostile, or dull individuals into trusting and aware people capable of more meaningful lives. [p. 38]

By looking at the above three briefly outlined aspects of the Esalen approach one can appreciate that a conglomerate exists, but one with the overriding goal of experiential learning on essentially a sensual level. The minimal focus upon cognitive understanding of group or organizational processes is in keeping with Murphy's (1967) stated goals of Esalen.

The fostering of individual personal growth through expansion of perceptual awareness carries with it the threat of the individual becoming so entranced with the sensations received through reawakened senses that he begins to disregard the more mundane realities of everyday life existant in groups of people who are not so "re-awakened."





Cartwright (1951) suggested that in order to become a member of a given group certain specified standards of behaviour must be accepted. The risk that the present author believes exists in the Esalen approach is that the individual in adopting the behavioural standards involved in "sensory re-awakening," for the temporary Esalen group alignment, is unable because of lack of preparation to make the transition back to the pragmatic realities of daily life. For the present author an amalgamation of both the Esalen and the NTL approaches to personal reorganization seems the most feasible way to achieve the goal of greater personal growth with minimal danger of personal disorganization.

A composite of both approaches could produce the most beneficial results. Sensory re-awakening could perhaps be a necessary initial step in the process of becoming aware of one's own life experience. This followed by acknowledgement of feedback describing the effects of one's behaviour upon others, and experimentation with new behaviours in the presence of the trusted others should help to develop a more personally satisfying life process which does not parasitically interfere with another individual's life, but in fact may symbiotically be complementary.

Just as there is difficulty in describing the nature of personal self-enhancement through the group process,



there is fundamental difficulty in defining the very nature of what constitutes a group.

### The Group

The term group has a variety of meanings. Homan (1950) described the group as the commonest social unit and suggested that in order to understand human behaviour it would be necessary to understand group behaviour.

Olmsted (1959) distinguished between classes or aggregations of people and groups by defining the latter as:

...a plurality of individuals who are in contact with one another, who take one another into account, and who are aware of some significant communality. [p.21]

A further differentiation of relevance to this study is made when he described the "primary group" as one in which the "...members have warm, intimate, and 'personal' ties with one another...." [p.17] The mature sensitivity training group characterizes the primary group with its affective bonds.

Gibb (1954) pointed out three types of situations frequently described by the term group. A number of people collected independently at one location is referred to by Gibb as an aggregate rather than a group. If the people have something in common, for which they are meeting, they make up what Gibb calls a class. For Gibb, the term group is more accurately used when the individuals assembled are engaged in some interaction which can produce a change



in an individual as a result of a change in the group. Lewin (1939) had earlier made interdependence of the members the basic criterion for the existence of a group. Gibb restricted and rephrased Cattell's (1951) definition to arrive at the following:

The term functional group refers to two or more organisms interacting, in the pursuit of a common goal, in such a way that the existence of many is utilized for the satisfaction of some needs of each. (Gibb, 1954) [p. 879]

Building upon this definition, as it is applicable to sensitivity training groups, it is possible to develop the feedback model where emotional and intellectual interaction are maximized, in an atmosphere of trust and acceptance of individuality, allowing an individual to satisfy his personal needs. Bennis and Shepard (1956) support this definition, from a developmental point of view, when they state that the group or the individual can mobilize its resources towards intelligent action in solving its conflicts only when a method of consensual validation (feedback) is available. Self-disclosure of personal opinions about fellow group members and group function, as it affects the individual, is this type of consensually validating feedback system. People and therefore groups of people need feedback systems to assist them in moving towards a selected goal. According to Bradford, Stock, and Horwitz (1961), such a system consists of reporting information collected about the discrepancy between current group action and the group goal, followed by decision making





about change in group operation. An effective group permits its members to behave in accordance with their own personalities and needs as well as in regard to the maintenance needs of the group. It is assumed that each individual will characteristically reveal himself in his interpersonal relationships within the training group and will receive feedback concerning how others react to his behaviour on both verbal and non-verbal levels.

For the purpose of this study, a sensitivity training group is defined as a number of individuals interacting with each other in a climate of trust and acceptance so as to obtain personal feedback in an effort to develop congruence between self perception and perception of self as reported by others, with the overall goal being that of greater personal self-enhancement.

## II. SENSITIVITY TRAINING

Sensitivity training is not a conventional educational or therapeutic system. It contains elements of both systems, being a unique form of laboratory training which originated at Bethel, Maine in 1947. The newness and rapid development of laboratory training, and especially the sensitivity training approach has precluded the firm establishment of theoretical constructs and methodology.





## Goals of Sensitivity Training

Laboratory training and sensitivity training are based upon the theory that individuals can best gain understanding and skills from learning situations in which they have the opportunity to participate in groups which are struggling with interpersonal problems. The intensive experience, arising out of the techniques used, leads to improved understanding of one's self and one's relationships with others.

Schein and Bennis (1965) in discussing the goals of the training laboratory, accurately describe the goal of sensitivity training. The sessions are to provide the opportunity for the participants to learn about the following types of things with the first two having greatest relevance to sensitivity training.

1. Self: the delegates' own behavior in groups and the impact which their own behavior had on other members.
2. Others. The behavior of others in a group and the impact which their behavior has on them.
3. Groups. How groups work; what makes them function.
4. Larger systems. How organizations and larger social systems work.
5. The learning process. How to learn from their experience ('learning how to learn'). [p. 13]

It is a basic assumption of the procedure that personal experience must precede intellectual understanding. Both aspects of the process must complement each other or optimal learning which is personally useful and generalizable cannot take place.



## Sensitivity Training Techniques

Sensitivity training procedures according to Weschler, Massarik, Tannenbaum (1962); and Weckler and Craig (1965) focus upon the strengthening of the individual in his desire to experience events and people more fully. Weckler and Craig describe the situation as consisting:

...primarily of setting up an unstructured group situation in which the leader fails to conform to the expected role of 'leader' or 'teacher'. As a member expresses himself, the other members are encouraged to express their reactions. Hence, through feedback, each participant discovers the impact he makes on others.

The group facilitator-trainer, by personally risking openness through self-disclosure, provides a model for the other group members to emulate. Weschler et al (1962) indicates that as the participants overcome their initial anxiety and learn the rules of the "new game" they appreciate that there is less risk of failure and greater payoff in taking risks.

As people begin to experience themselves in a setting for self-exploration, they will learn to appreciate the value of openness--with a realistic assessment of its risks and appreciation for the potential rewards. [p. 44]

The role of the facilitator consists of providing a model of authentic openness where attention is focussed upon the experiential here-and-now with self-feeling being congruent with verbal self-disclosure.

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Byrd (1967) in describing the function of the trainer, in a procedure he refers to as "Training in a Non-group," provides a descriptive model of the facilitator role which combined with Izard's (1965) description and Gendlin and Beebe's (1968) ground rules for group discussion, developed the framework for the sensitivity training sessions used in this study. Izard emphasized that the role of the facilitator is "being himself." He must act upon his own feelings and experience as a person so that, by virtue of his exposure of personal assets and frailties, the group members will accept this as meaning that such behaviour is not only accepted but is encouraged. Izard modified the Rogerian concept of positive regard as follows:

I want to get to know you as a person and I am confident that I will come to like you if we can share experiences and get to know each other well. My experience has taught me that mutual sharing of personal perceptions and feelings leads to deep and meaningful relationships between people...., we must realize that we are human and imperfect.....Positive regard for the unique you must await the unfolding of the real you. I cannot actually like you as a person until I know you as a person--the real you. [p. 205]

The facilitator must meaningfully convey this attitude to the group. Similarly, the facilitator's personality and behaviour must communicate an empathetic understanding that:

I am deeply interested in you and your personal world, in coming as close as I can to perceiving and feeling as you do.....This does not mean that I want to make you over in my own image...I value separateness and individuality for you and for me. ...my highest value in relation to people is that a person be capable himself of functioning as a separate and integral human being on the basis of his own perceptions and feelings. [p. 207]





The facilitator in communicating positive regard, empathy and congruency, acts as a model designed to produce a similar expression in the group members. All of which is designed to produce a willingness in each individual to risk being himself. Byrd (1967) complements this by providing nine rules for facilitators:

1. Self-actualizing rule: The...trainer expresses his own autonomy, reactivity, and openness....
2. The provisional-try rule: The...trainer invents, explores and does creative thinking...a trainer ...must be risking 'mistakes'. He must try new behavior....
3. The Open Agenda rule: The...trainer communicates by words but more importantly through his behavior, his own personal growth goals....
4. Members initiate rule: People 'become' best when they initiate their own responses to cues that come from within....
5. The Common Language rule: The language of the...trainer must also be the language of the participants....
6. The Involvement rule:...demands trainer involvement from the beginning...he acts on his own personal goals in a way commensurate with the situation....
7. Leverage rule: The...trainer uses personal initiative as leverage....
8. The Norm Testing rule: The...trainer is concerned about coercive group norms that tend to form from the outset....The rule for the trainer is to test the usefulness of the norms he perceives as repressive to him as well as to the group....He resists when the group presses him for leadership to a goal leading nowhere....
9. The Spontaneous Response rule:...the trainer who makes a delayed response induces caution in the participants. [pp. 23-25]

Gendlin and Beebe (1968) in providing ten ground rules for group sessions outlines a rationale for the facilitator to follow:

1. Everyone who is here belongs here just because he is here, and for no other reason....
2. For each person what is true is determined by what is in him, what he directly feels and finds making sense in himself, and the way he lives inside himself....



3. Our first purpose is to make contact with each other. Everything else we might want or need comes second....
4. We try to be as honest as possible and to express ourselves as we really are and really feel--just as much as we can....
5. We listen for the person inside living and feeling....
6. We listen to everyone....
7. The group leader is responsible for two things only: he protects the belonging of every member, and he protects their being heard if this is getting lost...
8. Realism: If we know things are a certain way, we do not pretend they are not that way....
9. What we say here is 'confidential': no one will repeat anything said here outside the group, unless it concerns only himself. This applies not just to obviously private things, but to everything. After all, if the individual concerned wants others to know something, he can always tell them himself....
10. Decisions made by the group need everyone taking part in some way. [pp. 24-28]

By operating within this framework sensitivity training provides maximal opportunity for self-disclosure, as a form of personal risk taking, to take place. The facilitator should take every opportunity to demonstrate this framework through his verbal and non-verbal behaviour but not to present it as a formal list of rules suggesting the invitation to break them. For example, the matter of trust and confidentiality almost always is a topic of concern and discussion in this type of group, providing the facilitator with the opportunity to make comments in keeping with Gendlin and Beebe's rule number nine. Both Byrd (1967) and Gendlin and Beebe (1968) emphasize that the focus of the sessions is to be upon the data being generated by the interactions of the participants within the group and not upon situations external to the group. Through a focus upon the here-and-now situation it is possible for





all participants to share the same experience thus providing a common bond of experience.

### The Here-and-Now Focus Upon Being

The focus upon the here-and-now experience of the individuals participating in the group is perhaps the main distinguishing feature which delineates sensitivity training as a technique from other established and contemporary forms of counseling, psychotherapy, and behaviour modification techniques.

The here-and-now focus simply means that the common experienced behaviour of the participants engaged in the sensitivity training program provides the data for analysis, synthesis, and action. An effort is made to transform any there-and-then data brought up by a participant into here-and-now data so that all can share it as public, first hand, direct experience.

The here-and-now focus is consistent with the existential approach as outlined by Van Kaam (1966), Thomas (1967) and May (1967). The principle aim of the existential attitude is the helping of a person to accurately perceive and understand his present experiential world and to develop self-reliance (individuality) by constant emphasis upon the here-and-now. This approach deals with aspects of the past and future only as they are related to present tasks. Benne (1964) concurs with this position and further points out that only as





the group learns to focus upon the here-and-now will it be able to use this reference point to clarify the past and possible the future experiences as they relate to a members' out of group experiences. The goal of the here-and-now focus being to assist the individual in developing an openness to himself and to others without preconceived notions of cause and effect. This goal carries with it the price of living with some degree of uncertainty; however, within this orientation is the belief that uncertainty is also something to be experienced and coped with by searching for its meaning. Frankl (1963) found, as a result of his Nazi concentration camp experiences, that the meaning of life came from a full involvement in all aspects of it whether positive or negative.

Implicit in the existential approach is the faith that man is potentially capable of finding real personal and positive meaning to his existence, a position endorsed by Rogers (1967) who believes that the goal of living is in present here-and-now interpersonal relationships.

The basis of the sensitivity training emphasis upon the here-and-now is described by Schein and Bennis (1965) as centering upon the theory that concepts follow experience, and are especially understood as being significant, if the experience has emotional overtones.



Learning is based upon direct and personal experience and not upon distant or vicariously perceived material. The here-and-now experience provides a concrete reference point in reality to which the intellectually understood meaning can be attached. A great deal of intellectual understanding is accomplished by acquisition of material about the experience via the feedback obtained from significant others. The term feedback is used to describe the process by which we obtain information about our behaviour as it deviates from a desired goal. The most effective feedback being based upon observable and experienced behaviour, expressed contiguously with the behaviour by as many observers as possible.

The focus upon the here-and-now has a valuable side-effect, when combined with the lack of formal group structure, in that it produces what Lewin (1939) termed "unfreezing." The situation ambiguity and lack of familiar confirmative behaviour patterns also serve to enhance the process of undoing old established and perhaps ineffective behavioural patterns. Coupled with the unfreezing is the establishment of an environment exemplifying trust and personal psychological safety in the sense of it being safe to take a chance on trying a new behaviour.

A model of the training process is provided by Miles (1960) in which he incorporates the four processes; desire for change, unfreezing, involvement and feedback. (Miles, 1960), [p.303]





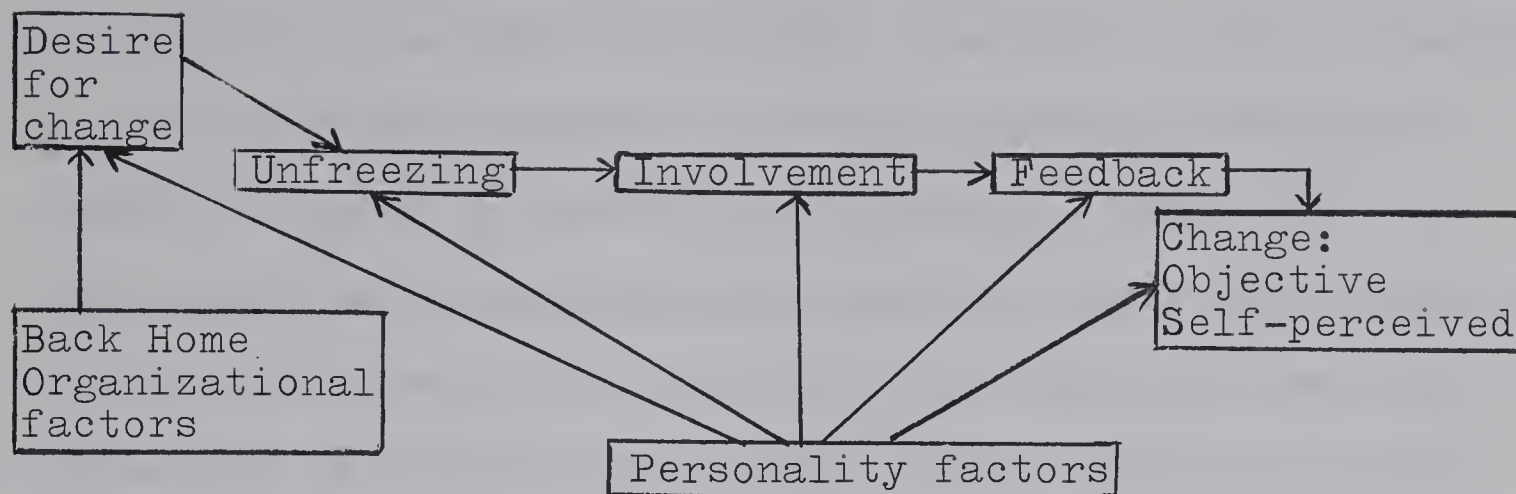


Figure 1. Antecedents of learner change at the laboratory.

According to Figure 1, a participant in sensitivity training would desire personal changes as a result of unsatisfactory back home organizational factors and, upon entry into the sensitivity training sessions would undergo an undoing of ineffective behaviour patterns, become involved in the microcosm of the group, obtain feedback about old and new behaviour, and hopefully begin to exhibit changed behaviour patterns that are observable and perceived by himself as moderated by his personality characteristics.

### Sensitivity Training as the Focus of the Study

Schein and Bennis (1965) provided the key to the reason for this study when they state:

We still know very little regarding the learning capacities of delegates, what makes good ones, and, even more critically how to screen out those individuals who do not profit from the experience. [p. 53]

The demand implicit in this statement is that we determine the salient personality characteristics which may be of relevance in determining the performance of any particular





individual in a training program. Related to this situation is the somewhat peripheral question raised by Krumboltz (1968) in terms of which type of group is best, the heterogeneous or homogeneously composed one. Before one can attempt to answer this question it is important that the relevance of various personality characteristics be fully examined in their relation to group process. An effort could then be made at balancing groups of individuals with known characteristics so as to test the effectiveness of the group process with various known quantities. If self-disclosure and risk taking attitude are significantly related then these variables could be used to balance groups to study the significance of various combinations of the two. If group members modify their personal levels of risk taking towards a point slightly above the group mean as a result of sensitivity training, then a heterogeneous grouping of moderately high risk takers with a group of conservatively oriented people will presumably produce the desirable effect of increasing the cautious inhibited person's risk taking attitude, allowing him to become more self-disclosing.

It was the intent of this study to examine the relationship between self-disclosure and risk taking attitudes. Self-disclosure in group situations was thought to be a personal behavioural correlate of risk taking attitude. Given that risk taking reflects a cultural value it is assumed to be transmitted through the



perception of behaviour of a risky nature. It was postulated that the act of self-disclosure in sensitivity training takes the form of an exhibition of one's attitude towards risk taking and should provide the necessary information exchange for the production of a risky-shift. Sensitivity training sessions are believed to constitute a situation which maximizes the possibility of risky behaviour being exhibited, especially when the focus is upon the here-and-now interpersonal relations of the participants.

Wallen<sup>1</sup> suggests that openness involves risk taking because you cannot receive a maximum guarantee with minimum risk. Willingness to risk self-esteem, being rejected or hurt by the other person, etc., depends upon the importance of the relationship to you.

In terms of Schutz's (1958) 3-factor theory of group development in which he postulates that a group naturally grows through an inclusion phase, a control phase, and an affection phase, risk taking of various degrees could take place during all phases. The level of risk would be dependent upon the degree of trust currently experienced in the group.

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### III. RISK TAKING

Study of the risky-shift phenomenon was prompted by Stoner's (1961) discovery that group decisions following discussion are consistently riskier than individual decisions. This seemed to be a surprising finding since it was believed that group pressure would cause a conforming conservatism. Since Stoner's original work many studies have shown similar results in many modified situations. Several alternative theories have been offered in explanation with Kogan and Wallach's (1964) responsibility diffusion and Brown's (1965) cultural value of risk theories obtaining the most consideration. The weight of the evidence favors Brown's position with Wallach and Wing (1968) providing the most recent support.

Brown (1965) proposed a "value of risk theory" as an explanation of the risky-shift phenomenon, suggesting that riskiness is a cultural value. Nordhøy (1962) had previously reported that modifications of the wording of some of the CDP situations could produce a conservative shift. Brown suggested that we culturally value both risk and caution according to the circumstances that we find ourselves in. A story problem involving the element of risk may invoke either an expression of the value of risk or of caution depending upon content. The function of the group discussion was hypothesized as being one of dispersal of information and teaching the individuals





how to be either risky or cautious in the specific concrete task. Cultural norms are thought to cause people to initially describe the decision problems (CDP) as warranting either a risky or cautious approach. Each individual values risk and wishes to appear at least as risky as his immediate peers. Prior to the group discussion of the CDP problems the individual does not know how he compares with the other group members and believes that he is as risky as most of the others. Through group discussion he learns if he is truly risky according to his perception of the group norm. Those who appraise themselves below the group mean feel compelled to move in the riskier direction to a point that they consider to be slightly above the group mean. To be greatly beyond the group mean is considered to be equivalent to being foolhardy. Acceptance of information concerning the group mean causes individuals to modify their private opinions producing the reported risky-shift.

Kogan and Wallach (1964) originally maintained that the risky-shift was due to the group members sharing the responsibility for the decision thereby reducing the fear of failure and causing each individual to feel less personal blame for any anticipated failure resulting from their decision. This reduction in fear of possible failure was held to be the reason that the group members felt free to take greater risks.



Teger and Pruitt (1967) report evidence in support of Brown's value of risk theory. They list two lines of evidence: (1) Hind's (1962) original finding that subjects characteristically believe that they are more risky than the average man; and, (2) Nordhøy's cautious shift which implied the need for a theory which will account for shift away from as well as towards greater risk taking. In supporting Brown's theory they amass considerable evidence against the acceptance of the Kogan and Wallach (1964) diffusion of responsibility theory.

#### Recent Studies in Group Risk Taking

Wallach, Kogan, and Bem (1964) used 336 men and women, divided into three member groups to determine whether risky-shift results could be obtained in decision making situations involving actual rather than hypothetical risks and payoffs. Using money as the incentive, and requiring that the group choose a member to represent it, they found that group responsibility functioned as a conservative agent whereas the group decision making process contributed to increased risk taking. Responsibility for others ceased to operate as a pressure towards conservatism when paired with the forces generated by a group seeking a consensus and became a force towards greater risk taking. Comparing the two situations of a person assuming responsibility for the group with and without consensus yielded a significant difference ( $p < .001$ ) in the direction of





greater risk taking in the consensus situation. It was further demonstrated that females did not manifest as dramatic results as did males, but the risky-shift still occurred. This sex difference was accounted for on the basis of the project incentives not being as attractive for females as for males. Females demonstrate stronger affiliative needs with greater risk taking being exhibited in group situations where nominations to represent the group takes place.

The occurrence of a risky-shift in actual risk situations and the reported tendency of females to exhibit greater risk taking when affiliative needs are involved are particularly pertinent to the present study. Females participated in this study of sensitivity training sessions where, according to Gendlin and Beebe (1968), a feeling of belongingness is an important part of the procedure. The findings of Wallach et al (1964) that risk taking behaviour decreases when each group member is made to feel responsible for the others in a non-consensus situation has relevance to group sensitivity training procedures. Wallach et al concluded that if only responsibility for others is felt then risk taking behaviour will diminish and the shift will become conservative with inhibited, cautious behaviour being displayed. It is therefore important that the feeling of responsibility for others, as well as for oneself, is coupled with the belief that any decision made by the group represents a





consensus that all group members endorse. Feedback procedures in the training sessions must therefore take the form of a group consensus, which if coupled with the feeling of responsibility should provide the conditions for maximal risk taking of the self-disclosure type.

Granted that a risky-shift can be produced it is necessary to determine what causes it. Wallach and Kogan (1965) using 180 male and 180 female college students, randomly assigned to same sexed groups of five, investigated the effects of information exchange, discussion, and forced consensus upon risk taking in groups. They found that discussion led to the operation of influential processes directed towards bringing individuals with extreme deviating opinions into line with the groups central tendency, a finding in keeping with Cartwright and Zander's (1960) theoretical position about group dynamics. Those subjects with the most conservative initial attitudes were forced to change to a greater extent than those whose initial attitudes were more risky. This finding appears to support Brown's value of risk theory as much as or more than the diffusion of responsibility explanation. Group discussion, defined as the affective give and take arising out of the face to face communication, was found to provide the necessary and sufficient condition for producing the risky-shift. Information exchange about the judgements made by others was not sufficient to produce the effect.



Wallach and Kogan interpreted their findings as meaning that the origin of the risky-shift phenomenon lies in the emotionally tinged interpersonal discussion resulting from the face to face confrontation which caused affective bonds to be formed allowing individuals to share the responsibility of the decision with others. The present author questions whether it is the sharing of responsibility of decision that is so important, or if it is the act of self-disclosure of an attitude that constitutes the essential portion of confrontation.

In a further effort to discover the quality of the discussion that produced the shift, Kogan and Wallach (1967a) used eight 5 member groups and two 4 member groups composed of male undergraduates to study the effects of physical separation of group members upon group risk taking. The results were taken to indicate that the visual component of the face to face communication was not necessary to produce the risky-shift. It was concluded that the voice was the sufficient vehicle of communication. The group members became differentiated and individualized on the basis of their expressive vocal style. Levy (1964) provides support for this finding in suggesting that the voice becomes identified with a person and is not disembodied. However, Levitt (1965) found that the accuracy of judging emotional communications was significantly better using the visual rather than the auditory medium. In the present project





both the visual and auditory senses will be allowed to operate thereby allowing maximal perception of the situation. It was also found that the discussion did not need to reach a group consensus in order to produce a shift in risk taking attitude. Kogan and Wallach concluded that the discussion was the sufficient condition for increasing group risk taking. This finding is in conflict with Wallach, Kogan and Bem's (1964) study of risk taking in actual payoff situations where it was assumed that consensus was necessary to produce the risky-shift, when a feeling of group responsibility was instilled. The use of females, with greater affiliative needs, in the first study and only males in the second may be sufficient reason for the different results. It would be of interest to replicate Kogan and Wallach's physical separation study using only females in the study since it appears that a definite sex difference exists with regard to risk taking attitude.

Further contradictory evidence is introduced by Rettig and Turoff (1967) as a result of their varying the type of exposure (live and taped) to group discussion to determine whether the physical presence of others was sufficient to promote increased risk taking in groups. Using a sample of 160 undergraduate volunteers in groups of four, with one student not verbally participating, an attempt was made to separate the effect of the discussion and the physical presence of others upon predictive judgements of unethical





behaviour. Exposure to live discussion rather than identical taped discussion was required to produce a risky-shift. Since the judgements to be made were socially undesirable in content, it was thought that the conservative shift would emerge because the discussion should have accentuated the negative value of risk taking. The opposite occurred with the groups' discussion centering upon justification of the unethical act thereby qualitatively modifying the content and endorsing the risky alternative. This is in keeping with Brown's view, that it is the nature of the situation content that determines whether the shift will be risky or conservative. This was thought to explain why behaviour not exhibited when one is alone can occur when in the presence of others. It was concluded that group discussion must provide information concerning both the social value of risk and the socially facilitative presence of others before a risky-shift can occur.

Wallach and Kogan (1965) attempted to test Brown's (1965) value of risk theory as it related to Brown's contention that, "...it is the information about other peoples answers that makes individual's move toward greater risk after group discussion." [p. 702] Using five member same sexed groups they had each participant complete the CDP individually, hand them in and then during the second exposure to the CDP complete ballots describing their decisions. This information was displayed on a blackboard



beside their names. The subjects were required to reach a consensus without discussion. No systematic shift was obtained in either the risky or conservative direction. Wallach and Kogan concluded that this finding cast doubt upon Brown's interpretation of the risky-shift phenomenon. It is doubtful if the factual information exchange balloting method used with the sample of 180 female and 180 male volunteer university students actually tested this part of Brown's theory. Brown's "information" may not have been composed only of the rational facts, but was more likely to have been the emotionally biased perceptions about what was transpiring in the dynamic group discussion of the rational facts.

Kogan and Wallach (1967b) further tested the information exchange hypothesis using 107 female volunteer students as subjects. One half of the subjects formed interacting groups which proceeded to produce the risky-shift in the classical manner. The other half listened to tape recorded sessions of the interacting group. Both conditions produced a risky-shift. This finding was interpreted as further refutation of Brown's information exchange theory. The present author questions if this is so, since the listening group obtained "information" about what was expected of them from listening to the interacting group





shift their levels of risk taking in the riskier direction. These attempts at refutation of a part of the value of risk theory cannot be accepted by this author as being successful.

### Individual Differences

As with all other facets of humanistic psychology the existence of individual differences as related to attitudes towards risk taking must be acknowledged as an appropriate area of research.

The relationship between personality variables and risk taking has been an area of considerable research. Rim (1964b) followed up his earlier (1963, 1964a) findings of a positive relationship between extraversion and high need for achievement with high riskiness, and of a negative relationship between high neuroticism scores and low riskiness, by studying social attitudes and risk taking. A heterogeneously employed sample of 58 subjects (mean age 30) were divided into ten groups of 5 and two groups of 4 consisting of about one half males. On six items of the CDP a significant ( $p < .02$ ) risky-shift was obtained in groups where discussion took place. In a control group where discussion was not allowed and the subjects retested after one weeks time, this effect was not obtained. This latter finding would suggest that the risky-shift phenomenon is not the result of capricious whim, but rather the effect of some lawful action. The





results supported the hypothesis that tender-minded (Eysenck, 1954) and radically oriented subjects would produce the greatest risky-shift. The tough-minded and conservative oriented subjects did not produce a risky-shift. The conservative simply became more cautious. Rim interpreted his findings as meaning that individuals described as being above average in radicalness and tender-mindedness were most influential in the production of the risky-shift since their initial risk ratings were closer to final group ratings.

Recognizability of riskiness is an important factor in the present study since the risky-shift phenomenon is to be demonstrated without the usual method of having the group members discuss the specific CDP situations as an avenue for displaying attitude towards risk. The significant positive correlation, reported by Wallach, Kogan, and Bem (1964), between initial risk taking attitudes and influence ranking in groups is in keeping with the expectation that recognition of the group's risk taking behaviour is possible. Group members correctly indicate that the high risk takers exerted more influence than did the conservatives. In a study designed to test recognizability of riskiness, Wallach, Kogan and Burt (1965) used 261 subjects assigned randomly within sex to five-member discussion groups which met either for discussion to consensus or discussion without consensus. The standard procedure for production of the



risky-shift effect was followed. The subjects were also asked to indicate the direction, if any, that the discussion had moved the average of the group's initial individual decisions, and also, to rank each individual in terms of the degree of forcefulness with which he argued his position. In both experimental conditions the subjects were able to correctly predict the direction of the shift in terms of greater riskiness, but significantly underestimated the degree of shift. This underestimation occurred across both conditions and sexes. Wallach et al., concluded that their finding; that males who shift more, as a consequence of group discussion, tend to judge that other group members also shift more and vice versa, can be accounted for partially in terms of assimilative projection (English and English, 1958). Assimilative projection is described as the process whereby an individual monitors his own shift behaviour and then attributes such a shift to the group. In the case of females, the mechanism of assimilative projection was not thought to be sufficient to account for the degree of accuracy that they exhibited. A genuine awareness of the group events was postulated to be responsible for the females greater accuracy. This finding was thought to be consistent with the general view that women are consistently superior to men in the ability to judge others accurately (Allport, 1961: Taft, 1955). It is suggested that women are more attentive to interpersonal events than are men. Exline (1963) showed that





women in a group setting tend to look at each other more and for a longer period of time than do men. Women are therefore thought to use information about the group process as cues to decide whether they are being as risky as the other group members. Wallach et al., also found that high initial risk takers were judged to be more forceful in their argumentation regardless of whether the discussion proceeded to consensus or not. The finding that the risky-shift, and that more risky individuals can be recognized, lends support to the present study, where an attempt was made to rely upon this perception of the riskiness, and the cultural value of same, to produce increased riskiness in a group situation that was not specifically designed to produce the risky-shift as it is measured by the CDP. It would be profitable to know what it was about the high risk takers that made them especially noticeable by the females. A personality characteristic such as anxiety may have been the orienting stimulus.

Kogan and Wallach (1967c) studied group risk taking as a function of the members anxiety and defensiveness levels, two characteristics which are relevant to the present study. Using 180 female undergraduates assigned to nine 5 member groups and classified as low anxious defensive, low anxious high defensive, a risky-shift was found to occur in all groups. The high anxious subjects exhibited the greater ( $p < .001$ ) shift in risk taking attitude and the high defensive subjects the least ( $p < .10$ ).





The high defensive group also achieved a consensus of opinion more quickly than the high anxiety group. This was interpreted as indicating a tendency to minimize affective involvement and interpersonal conflict on the part of the defensive subjects who characteristically fear exposure of personal weakness. The acceptance of this interpretation is subject to some degree of doubt in view of the statistical level of significance ( $p < .10$ ) obtained for the risky-shift exhibited by the high defensive subjects. The high anxious subject by being more risky places himself in a position of greater possible failure resulting in the experience of greater levels of anxiety. Analysis of variance applied to the mean shifts based upon individual post-consensus decisions failed to yield a significant difference, indicating that the personality characteristics under study appeared to exert their influence at the level of group decision but not later. There was a drift towards conservatism when the emotional supports and pressures of the group were removed. This latter point may have some relevance to the observation that some people who exhibit change during sensitivity training sessions quickly revert back to former behavioural patterns, whereas others seek out other participants so as to recapture the group feeling. In Kogan and Wallach's study, the lack of carry over effect may also be related to brevity of the group contact. These procedures take place during one session which may not be sufficient exposure for the full effect of the influential



encounter to become more permanent.

A recent study of personality characteristics was carried out by Baron (1968) using a sample of 58 female and 17 male undergraduates. He found positive correlations of .23 ( $p < .05$ ) between authoritarianism and conservatism; and, .37 ( $p < .01$ ) between belief in external control or reinforcement and conservatism as measured by the CDP.

The findings of Rim (1963, 1964a, 1964b), Kogan and Wallach (1967b) and Baron (1968) provide evidence to support the belief that relationships exist between various personality characteristics and risk taking attitudes in adults. Other studies have looked at the nature of the CDP situational content as a source of influence upon the group members in causing them to shift their decisions. Brown's (1965) value of risk theory suggests that the content of the situation dictates the direction of the shift.

#### Situational Content as the Cause of the Risky-Shift

It has been hypothesized that the nature of the content of the material under discussion relates significantly to the production of a shift in risk taking attitude.

Alker and Kogan (1968) examined the effects of norm oriented group discussion upon individual risk taking. Sixty female undergraduate sorority members served as subjects in an effort to determine if group discussion per se is the





critical determinant of the risky-shift effect. It was thought that the actual content of the discussion should be irrelevant. Group discussion focused upon issues that were unrelated to risk taking failed to generate the risky-shift. Following the discussion of a neutral subject (clothing fashions) there was a nonsignificant shift towards conservatism ( $p < .10$ ), however after discussion of hypothetical ethical issues a significant shift ( $p < .01$ ) to greater conservatism was produced. When the subjects were required to personalize their decisions concerning the same ethical issues the conservative shift produced was no longer statistically significant. The risky-shift effect was concluded to be dependent upon discussions explicitly focused upon risk taking. Discussions about particular topics can produce a significant increase in individual conservatism. When cultural modes of behaving are discussed the basis for enhancement of conservatism is established. These findings are consistent with Brown's contention that the stimulus demand of the situational content determines the direction of the shift.

Applying these latter findings to sensitivity training procedures leads one to predict that an introverted person would become more risky in his attitude and perhaps behaviour if the group discussed risk taking practices thus reinforcing the cultural value placed upon risk, or better yet demonstrated risky behaviour for him to model.





Similarly, an acting out person should become more conservative in his attitude and perhaps behaviour if the discussion was focused not on topics of risk, but upon the modes and morals of ethical behaviour with appropriate models displayed.

### Risk Taking in Children

If risk taking is a cultural value inherent in our society then it should be possible to demonstrate its existence in children at certain ages.

Although Slovic (1966) did not specifically use the CDP in his study of boys and girls (ages 6 to 16) he did demonstrate the existence of a sex difference in risk taking in children. The sex difference emerged between the ninth and eleventh years with boys being more risky. Slovic suggested that risk taking behaviour is a consequent of cultural pressure related to the process of sex-typing described by Mussen, Conger, and Kagan (1963). Although not specifically related to the risky-shift phenomenon, these comments and findings lend support to Brown's value of risk theory, as an explanation of the risky-shift effect by demonstrating a sex difference in risk taking attitude in young children similar to that found in adults.

In a non-group situation Pankove and Kogan (1968) studied the relationships between creative ability, risk taking, anxiety, defensiveness, and intelligence in children (84 boys and 78 girls in grade 5). The more



creative boys exhibited more confidence of success in the risk measure task and also manifested significantly ( $p < .05$ ) greater risk taking in the actual playing of the risk game. There was no such significant relationship found with the girls. It was suggested that a decision-making task with less of a motor-skill emphasis might produce the predicted creativity-risk-taking relationship in girls that was found with the boys. It must be recalled that it was demonstrated that female adults display more risk taking in social situations where affiliative needs are involved. Money was used as the incentive and may have been less attractive for the girls than for the boys. An examination of the moderator variables of anxiety and defensiveness produced the finding that the creativity-risk-taking relationship was significantly correlated ( $p < .02$ ) with low defensiveness in boys. It will be recalled that similar relationships have been found between risk taking, anxiety, and defensiveness in adult males.

#### Risk Taking Attitude as a Value

The question of whether risk is a value was the subject of Wallach and Wing's (1968) study of 292 male and 195 female undergraduate volunteers' opinions of their personal risk taking attitude as compared with what they assumed to be that of the majority of their fellow students. They reasoned that:

If risk is a general cultural value, and if --as seems reasonable to assume--self perceptions tend to





be biased toward cultural values, there should be a strong and pervasive error exhibited by persons of both sexes in the direction of viewing themselves as more inclined toward risk taking than they believe their peers to be. [p. 102]

The results provided very strong confirmation of the hypothesis that risk is a value with peers being described as more conservative than oneself ( $p < .001$ ).

Alexander (1966) makes pertinent comments concerning the general area of attitudes as scientific concepts when he states:

...attitude is regarded as a concept referring to an inner-state and assessed by observation of responses to specific stimuli under specified conditions. [p. 278]

The risk taking attitude under study was assessed by means of the CDP under sensitivity training conditions.

### Risk Taking and Sensitivity Training

If risk is a cultural value then it must be communicated in some natural manner. It seems possible that the means would be on the level of behavioural perception and modeling. Therefore, if an individual's attitude towards riskiness is demonstrated by his behaviour, then observation of a group of people behaving in an interpersonal situation conducive to the exhibition of risk should enable one to ascertain the group's mean risk taking attitude. If the risky-shift takes place because people move their personal risk taking level to a point slightly above the perceived group mean, then all participating group members would perceive this shift and act





accordingly. Behaviourally it was hypothesized that self-disclosure would be positively related to risk taking attitude. As one becomes more risky he discloses himself more. The more risky person tends to disclose himself more initially than the defensive cautious person. As a disclosing person experiences that he is not rejected for engaging in genuine self-disclosure, he continues to do so by operating at what he perceives to be the optimal level of self-disclosure (personal risk taking) for the group. West's (1968) finding of a positive linear relationship between highly anxious people and high self-disclosure is similar to Kogan and Wallach's (1967b) finding of a linear relationship between highly anxious people and high risk taking. The sensitivity training sessions were designed to provide the situation where both risk taking attitude and self-disclosure can be operative as they are moderated by anxiety and defensiveness.

Sensitivity training sessions constitute a situation which greatly increases the possibility of exhibiting risky behaviour especially when the focus is upon the here-and-now interpersonal relations of the participants. Ottoway (1966), in describing the group process involved in human relations training, implies considerable personal risk in authentic self-disclosure.

The comparisons of views on a subject, or a happening outside the group was found to be safer than examining interpersonal relations inside the group. The sharing of opinions was easier than the sharing of feelings.



The comparison of experience involved telling one's own experience and immediately raised the problem of how much about oneself one was prepared to reveal. [p.23]

Not only is risk involved in self-disclosure, but there is differential risk related to the nature of the material disclosed. The risk involved in describing oneself before a group is related to a willingness to become aware of how others perceived you and how your views compare with the consensus of the group. It was thought necessary, in this study, to obtain an indication of each participant's willingness to share personal data of various degrees of riskiness with others.

Jourard (1968a), in reporting on "Project Replication"<sup>1</sup> consisting of a number of projects completed by graduate students under his direction where the degree of experimenter-subject familiarity levels were varied, provides evidence supporting the position that authentic self-disclosure on the part of the experimenter produces more honest disclosure by the subjects. In Drag's (Jourard, 1968b) study, transference of willingness to disclose was evidenced by the subjects maintenance of the high degree of intimate disclosure developed with the experimenter in new situations with strangers. Drag also found that the disclosure topics rated high in intimacy value, on a pre-disclosure questionnaire did not predict

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1. Personal communication Dr. S. M. Jourard. University of Florida, Gainesville.



the topics that subjects could or would discuss after a 20 minute self-disclosure session with the experimenter. The same scale was a good predictor of discussion topic hierarchy in a group of subjects who did not experience the self-disclosure session, but who simply entered into an impersonal interview situation.

It was predicted that items initially ranked as highly intimate (great risk to disclose) would lose reported intimacy value on posttest rating being rated lower than they were initially. Friedman, as reported by Jourard (1968a), developed a self-disclosure questionnaire of discussion topics rated for intimacy level by a group of college student judges. This scale was used to measure the willingness of the participants in this study to disclose themselves.





## CHAPTER III

### DESIGN OF THE STUDY

The Pre-test Posttest Control Group Model was chosen as the research design. Subjects were randomly assigned to three treatment conditions by using a table of random numbers (Walker and Lev, 1953). This design was chosen because it provided for control over the spontaneous occurrence of changes in self-disclosure rate and risk taking attitude. The evaluation of the efficacy of sensitivity training as a means of producing an increase in self-disclosure and a shift in risk taking attitude demanded the use of a pre-test posttest measurement model.

#### I. INSTRUMENTATION

All subjects were required to complete the following list of questionnaires in the stated order at both the pre-test and posttest assessment times. An information sheet was completed first of all, in order to provide descriptive data about the subjects. (Appendix A)

1. The Achievement Anxiety Test (Alpert and Haber, 1960) (Appendix B)
2. The Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960) (Appendix C)
3. The Manifest Anxiety Scale - short form (Bendig, 1956) (Appendix D)
4. The Self-Disclosure Questionnaire (Jourard, 1964) (Appendix E)



5. Self-Disclosure Questions (Jourard, 1968a)  
(Appendix F)
6. The Choice Dilemmas Procedure (Kogan and Wallach, 1964)  
(Appendix G)

### The Achievement Anxiety Test

The Achievement Anxiety Test (AAT) was included in the test battery as a measure of the specific type of anxiety that Kogan and Wallach (1964) found to act as a moderator personality variable in their work on risk taking. Alpert and Haber (1960) developed this 19 item instrument to measure the effects of facilitating and debilitating test anxiety upon achievement. It consists of two independent scales; a facilitating scale of nine items and a ten item debilitating scale with each item answered on a five point scale in terms of the degree of applicability to the subject. Alpert and Haber report test-retest reliability over an 8 month period of .75 for the facilitating scale and .76 for the debilitating scale. The balanced nature of the scale makes it less susceptible to acquiescent and nay-saying response sets. Alpert and Haber (1964) believe that specific anxiety scales, such as the one that they developed for predicting academic success, and general anxiety scales seem to measure something different from one another. While it is of value to assess this test anxiety type of predictor, for the purposes of this study a measure of general manifest anxiety was of equal importance.



## The Manifest Anxiety Scale

The Taylor Manifest Anxiety Scale (MAS) in its shortened form (Bendig, 1956) was used in the test battery rather than Taylor's (1953) longer scale. Buss (1955) extended Hoyt and Magoon's (1954) item analysis of the Taylor MAS from a college population to a neuropsychiatric patient population and found a Pearson Product-Moment correlation of .60 between the ratings of degree of anxiety by psychologist judges and subjects designated as to degree of anxiety by use of the MAS. Buss concluded that this value taken with Hoyt and Magoon's contingency coefficient of .47 for the college student population indicated "...that the Taylor Scale has fair validity for diverse populations." [p. 409]

The Bendig short form contains the 20 most consistently valid MAS items, of which 16 are keyed in the anxious direction. Bendig concluded that the short form eliminated items of low internal consistency, provides scores as reliable (median internal consistency reliability .76 as compared to .82) as the 50 item MAS, and is more parsimonious of testing time. Taylor (1956) cited evidence that the performance of anxious subjects under stress was significantly worse than the anxious group tested under neutral conditions. If it can be assumed that poor performance is related to failure to meet a criterion, then possibly this may mean that highly anxious subjects are





taking more chances and are therefore being more risky. For the purpose of this study it was assumed that sensitivity training and in particular self-disclosure constituted stress producing situations. If this is the case, then it seems logical that a measure of general manifest anxiety would be appropriate for the assessment of the relationship between anxiety and self-disclosure as a personalized form of risk taking.

### The Marlowe-Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960) was used by Kogan and Wallach (1964) in their original work on risk taking as an index of defensiveness. In the development of the scale Crowne and Marlowe defined social desirability as the "need of Ss to obtain approval by responding in a culturally appropriate and acceptable manner." [p.353] The scale is composed of 33 items which define behaviours which are culturally sanctioned and approved but of improbable occurrence. Eighteen items are keyed true and 15 false, making a response set interpretation of results highly improbable. An internal consistency coefficient of .85 and a test-retest correlation over a one month interval of .89 is cited as evidence of reliability. Kogan and Wallach (1964) employed this scale as an index of what they termed "defensiveness." This term was defined as:

...an index of the tendency to deny personal traits that, although moderately undesirable, are possessed by virtually everyone and to accept traits that are highly desirable but possessed by virtually no one.[p.23]



Kogan and Wallach (1964) in employing the term, "defensiveness" (Rogers, 1959) assume that it implies an extreme concern for image maintenance which is consistent with a cautious approach to decision making situations.

The Marlowe-Crowne Social Desirability Scale was used in this study to obtain a measure of "defensiveness" as described by Kogan and Wallach (1964, 1967d).

### The Self-Disclosure Questions

A willingness to trust others with knowledge about our personal feelings and beliefs is a necessary prerequisite for self-disclosure. Given that opportune conditions for self-disclosure may exist in a sensitivity training group, it is of importance to determine if an individual is willing to disclose himself to others. What a person will disclose and whether he will is a function of the nature of the material to be disclosed, the personality characteristics of the person, the setting, and the characteristics of the audience.

Jourard (1968b) in attempting to measure trust between experimenters and their subjects, developed a research instrument to measure the subjects willingness to disclose himself to the experimenter. The original Questionnaire for Measuring Trust consisted of 52 items for which Jourard reported split half reliability coefficients higher than .90 for both men and women. Jourard (1968a) provided a





revised 21 item list of "Self-Disclosure Questions" rated by 30 male and 30 female college student judges as to degree of intimacy. The scale was used to determine the participant's willingness to trust other group members with personal information. The production of a difference in pre-test and posttest ratings of items on this scale was postulated to be indicative of change in willingness to be open in self-disclosure, presumably as a result of having re-evaluated the items as to their riskiness for disclosure. Friedman and Drag (Jourard, 1968a) report in separate studies of a similar nature that even limited amounts of self-disclosure produce changes in the intimacy ratings of these types of items.

### The Self-Disclosure Questionnaire

A sixty item Self-Disclosure Questionnaire (SDQ) was developed by Jourard and Lasakow (1958) to determine the extent to which research subjects vary in the topics that they disclose to various target people and the extent to which there are cultural and sex differences. The SDQ as published by Jourard (1964) was used in this study to determine if sensitivity training could produce a modification in the amount of self-disclosure that a person engages in towards selected target people. The SDQ consists of six general categories of information about the self, with ten items in each category. Subjects indicate on a 4-point scale the extent to which they have talked to each





specified target person about the sixty listed items. A corrected reliability coefficient (odd-even method) of .94 was obtained on a sample of 70 single male and female college students. Of interest is the aspects of self that formed "high disclosure" clusters (tastes, and interest, attitudes and opinions, and work) and "low disclosure" clusters (money, body, and personality) which were significant at the .01 level. Jourard (1964) questions whether the high and low disclosure clusters reflect a cultural consensus as to what is readily disclosable and what is not, a question relevant to the present study. Jourard (1961) and Plog (1965) report cultural differences between native Germans, Americans, and the British. Reliability correlations across cultures are in excess of .89 with scales of various lengths. Americans were found to be more disclosing than other nationalities. The present study attempted to test the significance of a relationship between risk taking attitude and self-disclosure.

#### The Choice Dilemmas Procedure

The Choice Dilemmas Procedure (CDP), as described by Kogan and Wallach (1964), was used to obtain a measure of the risk taking attitude and to determine if a risky-shift could be produced in sensitivity training sessions where one's risk taking attitude, although not explicitly discussed, is postulated to be implicitly



demonstrated in behaviour. The CDP consists of twelve descriptive situations which require that the subject give advice to a hypothetical person faced with a difficult decision. The questions cover a wide range of topics and are sufficiently ambiguous to force the subject to make some personal assumptions in arriving at a decision. The subject must decide whether to advise the person to take either the risky or nonrisky alternative. The risky alternative always involves a better outcome than the nonrisky alternative. If the risky alternative is chosen, then the subject must also decide the minimum probability or odds of success that he is willing to accept before choosing the alternative. The preference for high risk is indicated by the choice of the risky alternative with the lower odds of success. The probability levels offered for success of the risky alternative are 1 in 10, 3 in 10, 5 in 10, 7 in 10, and 9 in 10. If the subject refused to choose a risky alternative regardless of the probabilities, then a score of 10 in 10 is assigned to that item. A high score indicates greater cautiousness. A risky-shift is represented by a decrease in the scores from pre-test to posttest measures. The reliability (odd even) coefficients reported for males ( $n = 114$ ) of .53 and for females ( $n = 103$ ) of .62 are considered by the authors Kogan and Wallach (1964) as being satisfactory for a 12 item scale. Bem, Wallach, and Kogan (1965) report a test retest (over one week) reliability coefficient of .79 indicating that the





reliability of the instrument is satisfactory. The CDP scale complete with instructions can be found in Appendix G.

The total testing time was approximately 90 minutes for all subjects except those assigned to the risky-shift condition. They met immediately afterwards for an additional 45 minutes in order to comply with the procedure for classically demonstrating a risky-shift.

## II. HYPOTHESES TESTED

This project investigated some personality correlates of self-disclosure as a personalized expression of risk taking attitude in the context of group sensitivity training. Self-disclosure as it occurs in sensitivity training was postulated to be a behavioural form of risk taking and therefore positively related to risk taking attitude. A shift in risk taking attitude takes place in groups where specific decision making discussion takes place (Stoner, 1961; Kogan and Wallach, 1964; Teger and Pruitt, 1967). The nature of the shift, either towards greater or less riskiness, is dependent upon the content of the material discussed, the exchange of information concerning personal levels of risk taking and, the personality characteristics of the group members.

It was necessary to demonstrate that a risky-shift could be produced in groups of University of Alberta education undergraduates in order to provide a basis for





saying that this effect could be produced in similar groups by means of sensitivity training.

### Hypothesis I

The risky-shift phenomenon can be demonstrated by using the Choice Dilemmas Procedure, as described by Kogan and Wallach (1964), with a sample of University of Alberta education undergraduates.

### Hypothesis II

As a result of sensitivity training the overall group mean attitude towards risk taking will increase in the direction of greater riskiness. The post-treatment test of individual risk taking attitude will indicate a significantly higher risk taking attitude than the pre-treatment measure. A risky-shift will be produced through the sensitivity training condition.

### Hypothesis III

Total self-disclosure, as measured by Jourard's Self-Disclosure Questionnaire, is positively correlated with risk taking attitude as measured by the Choice Dilemmas Procedure.

### Hypothesis IV

The participants in the sensitivity training will become more self-disclosing as measured by Jourard's



Self-Disclosure Questionnaire. The post-treatment test of self-disclosure will show a significant increase in reported disclosures to male friend and female friend targets.<sup>1</sup>

#### Hypothesis V

High test anxious subjects, as classified by the Achievement Anxiety Test (operationally defined as being above the median) will also be high risk takers on the Choice Dilemmas Procedure.

#### Hypothesis VI

High anxious subjects, as classified by the Bendig short form of the Taylor Manifest Anxiety Scale (operationally defined as being above the median) will also be high risk takers on the Choice Dilemmas Procedure.

#### Hypothesis VII

High defensive subjects, defined as high scorers on the Marlowe-Crowne Social Desirability Scale

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1. The other targets mother, father, and spouse were disregarded for the purpose of this hypothesis since it was thought that university students would not have the opportunity of disclosing more to parents if they wished to since many would be living away from home. The spouse target, was disregarded since it was not applicable to the majority of the participants. These targets were included in the questionnaire in order to provide ancillary data concerning total self-disclosure by the sample.



(operationally defined as being above the median) will also be low risk takers on the Choice Dilemmas Procedure.

#### Hypothesis VIII

High defensive subjects, defined as high scorers on the Marlowe-Crowne Social Desirability Scale (operationally defined as being above the median) will rate low on the Self-Disclosure Questionnaire (total self-disclosure rate).

#### Hypothesis IX

Sensitivity training will produce a significant reduction in the defensiveness posttest measure of those individuals initially classed as high defensive.

#### Hypothesis X

Sensitivity training will produce a significant reduction of the mean intimacy value of items rated highly intimate on a pre-treatment administration of the Self-Disclosure Questions.

### III. THE SAMPLE

Ninety-three undergraduate education students volunteered for the study. The introduction of the volunteer effect was not judged to constitute a deleterious bias since the majority of research in the area of risk taking has used volunteers as subjects and most, if not all,





people who enter sensitivity training do so voluntarily. The major difficulty in using volunteers is that it limits the generalizability of the findings in that Rosenthal (1965) has found volunteers for psychological experiments to be significantly different from non-volunteers. Volunteers were found to exhibit greater intellectual ability, interest, and motivation; greater unconventionality; less authoritarianism; greater need for social approval; lower age, and were more sociable than non-volunteers.

In keeping with Izard's (1965) suggestion the following invitation was extended personally, by the author, to several Faculty of Education undergraduate psychology classes.

Many of you have heard of group process training and sensitivity training programs. I am currently doing research in this area. Briefly, the goal of sensitivity training is to facilitate personal awareness and growth through interpersonal group experience. Some of the things that will assist this growth will include learning more about yourself, how others see you, and learning about interpersonal relations. We all know that everyone is capable of growth and change. All of you who volunteer will undoubtedly learn a great deal about yourself. I ask something of you also. The research aspect of the program will involve your answering some questionnaires on two separate occasions. The information obtained will help us to understand more about how people grow and become more effective in their individual and interpersonal functioning. I sincerely believe that you will find this experience an interesting and worthwhile one and encourage you to volunteer. Please come to room 129 in the Education Building on Wednesday at 7:00 p.m. Thank you very much.



The introductory Developmental and Learning theory classes were approached first, but due to limited turnout the second year Introduction to Guidance classes were also canvassed for subjects. Because of extremely cold weather (26 days of below zero weather) the project was delayed one week so that sufficient numbers of subjects could be obtained and randomly assigned to the three treatment conditions. Three separate meetings had to be held in order that the required numbers could be obtained. On all three occasions the same procedure was used to assign subjects to the various conditions.

### The Procedural Model

All of the volunteers were assigned to one of three experimental conditions, one of which was used to demonstrate the risky-shift phenomenon, another acted as a time lapse control group, and the third was given sensitivity training.<sup>1</sup>

It was crucial that the majority of subjects assigned to Conditions A and B (Figure 2.) complete the study by returning for the posttest. Since Condition C was designed to demonstrate that a risky-shift could be produced it was not necessary for them to attend the posttest.

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1. Due to infrequent but possible psychological disturbances occurring during sensitivity training, two qualified counseling psychologists were available for immediate consultation by the trainers.



| Condition | Pre-test | Treatment                         | Posttest |
|-----------|----------|-----------------------------------|----------|
| A         | 1 n = 12 | <u>8 sensitivity</u> ----         | n = 10   |
|           | 2 n = 10 | training sessions<br>-----        | n = 9    |
|           | 3 n = 10 | -----                             | n = 7    |
| B         | 1 n = 11 | <u>8 week time lapse</u>          | n = 9    |
|           | 2 n = 9  | -----                             | n = 7    |
|           | 3 n = 10 | -----                             | n = 9    |
| C         | 1 n = 12 | <u>CDP discussion and</u>         | n = 10   |
|           | 2 n = 9  | <u>8 week time lapse</u><br>----- | n = 6    |
|           | 3 n = 10 | -----                             | n = 5    |
|           | N = 93   |                                   | N = 72   |

Figure 2. Assignment of subjects to experimental procedural model.

## V. DESCRIPTION OF SAMPLE

The ninety-three volunteers were assigned to the various treatment conditions as described by Table I. Condition A was the main experimental condition of sensitivity training; B, the control condition; and, C was the classical risky-shift condition. Three subgroups composed each of the three treatment conditions.





TABLE I.

## SUBJECT DISTRIBUTION BY CONDITION AND GROUP AT PRE-TEST

| CONDITION | 1  |     | 2  |   | 3  |   | TOTAL GROUP |    |
|-----------|----|-----|----|---|----|---|-------------|----|
| A         | 12 |     | 10 |   | 10 |   | 32          |    |
|           | 4* | 8** | 4  | 6 | 4  | 6 | 12          | 20 |
| B         | 11 |     | 9  |   | 10 |   | 30          |    |
|           | 4  | 7   | 4  | 5 | 3  | 7 | 11          | 19 |
| C         | 12 |     | 9  |   | 10 |   | 31          |    |
|           | 4  | 8   | 3  | 6 | 4  | 6 | 11          | 20 |
|           |    |     |    |   |    |   | 93          |    |
|           |    |     |    |   |    |   | 34          | 59 |

\* Males    \*\* Females

The original sample consisted of 34 males and 59 females. The final sample, i.e., those that returned for the post treatment testing consisted of 27 males and 45 females for a total of 72 subjects as described by Table II.

The following description of the sample and the results of the project concerns only those subjects described in Table II. The subjects excluded from the final sample were lost for a variety of reasons as described in Table III.



TABLE II.

## FINAL SAMPLE DISTRIBUTION BY CONDITION AND GROUP

| CONDITION | 1  |     | 2 |   | 3 |   | TOTAL GROUP |    |
|-----------|----|-----|---|---|---|---|-------------|----|
| A         | 10 |     | 9 |   | 7 |   | 26          |    |
|           | 2* | 8** | 4 | 5 | 3 | 4 | 9           | 17 |
| B         | 9  |     | 7 |   | 9 |   | 25          |    |
|           | 3  | 6   | 3 | 4 | 2 | 7 | 8           | 17 |
| C         | 10 |     | 6 |   | 5 |   | 21          |    |
|           | 4  | 6   | 3 | 3 | 3 | 2 | 10          | 11 |
|           |    |     |   |   |   |   | 72          |    |
|           |    |     |   |   |   |   | 27          | 45 |

\* Males    \*\* Females

TABLE III.

## SUBJECTS DROPPED FROM FINAL SAMPLE

|   |    |
|---|----|
| Unable to contact by phone or mail.....                                     | 9  |
| Modified questionnaires.....  | 1  |
| Dropped from sensitivity training for<br>lack of consistent attendance..... | 5  |
| Withdrew from university.....   | 1  |
| Did not appear for posttest.....  | 5  |
| Total   | 21 |



The average age of the seventy-two participants was 22 years, with a standard deviation of 4.8 years. The subjects in the three treatment conditions did not vary significantly with regard to age. The final sample was composed of seventeen married (14 male, 3 female) subjects who participated in the treatment conditions as described by Table IV.

TABLE IV.

## ALLOCATION OF MARRIED SUBJECTS

| GROUP | MALE | FEMALE | TOTAL |
|-------|------|--------|-------|
| A     | 4    | 1      | 5     |
| B     | 6    | 2      | 8     |
| C     | 4    | 0      | 4     |
| Total | 14   | 3      | 17    |

The total sample was subjected to analysis of variance procedures to determine if randomness had been obtained across the three treatment conditions. All three groups were found to be comparable on all test variables when the total sample was analyzed. The pre-test means, standard deviations, F-ratio's and probabilities are to be found in Appendix H.





## V. COLLECTION AND ANALYSIS OF DATA

Data collection. At the first assessment meeting each participant was assigned a number upon completion of the identifying information sheet. While assistants were handing out and collecting the other questionnaires the author randomly assigned each participant to one of the three experimental conditions through the use of a table of random numbers (Walker and Lev, 1953). Each group received a representative distribution of both sexes which in effect produced a stratified random sample in each experimental group. The procedure used to collect the data and to assign subjects to the various groups was as follows:

1. All participants completed the information sheet and it was collected.
2. The remainder of the questionnaires were handed out individually and only after the preceding one had been collected. While this was being done, the author was assigning each subject to his group by the following procedure;
  - a) the information sheets were separated into same-sexed piles,
  - b) each information sheet was numbered,
  - c) the table of random numbers was entered randomly and the females and males were separately assigned on a consecutive basis to groups.
3. After the last questionnaire was completed and handed in each participant was given an envelope containing instructions of when and where he was to next meet.



4. Subjects assigned to Condition C were taken by an assistant to a separate room where they followed a standardized procedure designed to produce a risky-shift as described in manual "A" in Appendix I.

After six weeks had elapsed each participant was sent a letter advising him of the progress of the project and told that his attendance at a general meeting of all participants was desired at a specified time and place. Fifty-two subjects appeared for the meeting as scheduled. Twenty subjects were tested individually as they had indicated that they could not attend the general meeting. The posttest questionnaires were administered in the same order as the pre-test questionnaires.

Experimental Treatment. Twenty-six of the 32 subjects assigned to sensitivity training treatment condition completed the program. Any subject who missed more than two consecutive meetings was dropped from the sample. The one person who dropped out of the sensitivity training program was interviewed by the author in an effort to be sure that nothing untoward had caused her discomfort to the extent that she felt that she must leave the group. She left the program in order to obtain evening employment. Five subjects did not attend the first session of their assigned groups, and when contacted indicated that because of student teaching commitments, studying, working evenings, and family concerns, they had decided not to participate.





The three groups met once a week for eight weeks, completing the sensitivity training with a 6 hour marathon as a ninth session. The sessions lasted on the average 2 and 3/4 hours per evening. The average amount of time spent in sensitivity training was 25 3/4 hours. The excellent attendance and very low dropout rate can be at least partly attributed to the capable leadership provided by the three facilitators. Each facilitator was given a manual (Appendix J) outlining in general terms, the procedures to be followed in the sensitivity training sessions.

After the project was over the facilitators were independently asked to describe the phases of development which they had seen their groups grow through. They agreed that their groups moved very quickly through the inclusion phase of group development within the first two sessions. Control and leadership struggles ensued in about the third session with considerable negative feelings expressed and frustration experienced by group members. They maintained the focus upon here-and-now behaviour description rather than upon evaluation. An atmosphere of trust was reportedly established by the fifth session and from then on the groups worked in the affect domain until the last session when new business was discouraged and more time was spent in describing the outside contacts that were being made, i.e., a new inclusion phase outside of the group. All trainers commented that considerable





self-disclosure took place in sessions seven and eight prior to the marathon. By the eighth session members were described as being open with their feelings and thoughts about each other without being threatening, and also as being cohesively protective of each other. All three trainers were impressed by the speed with which their groups developed trust relationships and became involved in interpersonal affectional relationships.

The descriptions by the trainers were substantiated by written statements from a few group members. One participant described the group process in the following manner:

...At first we talked mostly small talk; we avoided personal confrontations. However, as we got to know each other better, we became more open with our feelings and ideas. We could detect when a member was disturbed or anxious about something and we did not hesitate in pointing out our concern about him to him. We truly wanted to help him if that was possible in some way. It really concerned us when one of the members' of the group was troubled, or was unusually unresponsive and quiet. But it was only during the last 2 or 3 sessions that we really developed this feeling of well, empathy....

Other subjects indicated that the sensitivity training was of value to them because "I learned how to communicate my feelings a bit more which I realized is very difficult because we do very little of it in our every day activities," and because "The group afforded an opportunity for persons to speak their mind."

Analysis of data. The procedure followed in testing the hypotheses is described below. The IBM 360 computer was used for all data analysis.



### Hypothesis I.

1. The raw data from the CDP was transformed into three scores for each subject; a total score (12 items), a conservative drag score (items 5 and 12), and a ten item risk score.

2. Group means were computed for the pre-discussion and post discussion tests.

3. The total group ( $n = 31$ ) pre-discussion and post discussion mean CDP scores were compared for significance of differences between means using the correlated t test.

4. The reduced sample of 21 subjects who returned for the posttest eight weeks later underwent the same statistical treatment.

### Hypothesis II.

1. The raw data from the CDP were transformed into three scores for each subject ( $N = 72$ ); a total score (12 items), a cautious score (items 5 and 12), and ten item risk score.

2. Group means were computed for the pre-test and posttest data for the three experimental conditions.

3. The pre-test means of the three experimental groups (sensitivity training, control, and risky-shift conditions) were compared using a one way analysis of variance design to determine if the three groups were comparable. If the groups had been found to differ significantly then an analysis of covariance design would have been used.

4. The three groups; sensitivity training ( $n = 26$ ),





control ( $n = 25$ ), and risky-shift ( $n = 21$ ) were compared for significance of differences between pre-test and posttest means using a 2-factor analysis of variance with repeated measures design. If a significant treatment main effect had been found then a simple effects procedure would have been used to isolate the location and magnitude of the treatment effect.

5. The three groups were also compared for significance of differences between pre-treatment and posttest means for male and female subjects separately in an effort to isolate any possible sex differences.

### Hypothesis III.

1. The total self-disclosure score for each of the 72 subjects was computed.

2. The raw data of the CDP was transformed into three scores for each subject; a total score (12 items), a conservative drag score (items 5 and 12), and a ten item risk score.

3. The Pearson product-moment correlation coefficients between the total self-disclosure score and the three risk taking attitude scores were found.

4. The one tailed t test of significance was applied to determine if the correlational relationship found to exist between the two variables differed significantly from zero in the positive direction.





5. The procedure outlined above was repeatedly used to determine if sex differences or marital status had a differential effect on the relationship between self-disclosure and risk taking.

#### Hypothesis IV.

1. The Self-Disclosure Questionnaire raw data from the pre-test and post treatment measures were transformed into male friend and female friend target total scores across all aspects of self-disclosure.

2. Group means were computed for the pre-test and posttest data for the three experimental conditions.

3. The pre-test means of the three experimental groups were compared using a one-way analysis of variance design to determine if the three groups were comparable. If the groups had been found to differ significantly, then an analysis of covariance design would have been used.

4. The three experimental conditions were compared for significance of differences between pre-test and posttest means using an analysis of variance with repeated measures design. The finding of a significant treatment main effect led to the use of a simple effects procedure designed to isolate the location and magnitude of the treatment effect.

#### Hypothesis V.

1. The AAT yielded three scores; the Facilitating Anxiety score, the Debilitating Anxiety score, and the total Test Anxiety score.



2. The median Total Test Anxiety score was obtained and the subjects were classified as high anxiety if their score was above the median and low anxiety if their score was below the median.

3. Using the subjects designation of either high or low test anxious the two groups formed were compared as to risk taking attitude using a t test comparison of means approach.

4. A one-tailed t test was used to test the significance of differences between the means of the two groups since the direction of the difference was hypothesized.

5. The same procedure was used to test the significance of risk taking attitudinal differences between subjects classified high and low anxious on the Facilitating and Debilitating anxiety scales.

#### Hypothesis VI.

This hypothesis was tested using the same procedure as outlined for Hypothesis V with the exception that the Bendig produces only one total manifest anxiety score.

#### Hypothesis VII.

1. The Marlowe Crowne Social Desirability Scale was scored and the median score for the total sample was obtained. A subject whose score was above the median was classified as high defensive and if below the median than low defensive.





2. Using the subjects designation of either high or low defensive the two groups formed were compared as to risk taking attitude using a t test comparison of means method.

3. A one-tailed t test was used to test the significance of differences between means of the two groups since the direction was hypothesized.

4. The above procedure was also used to test the significance of differences for both the male and female subsamples.

#### Hypothesis VIII.

1. Each subject's score on the Marlowe Crowne Social Desirability Scale was obtained. The median score was found and subjects whose scores were above the median were designated as high defensive just as those subjects whose scores were below the median formed the low defensive group.

2. The self-disclosure rates to all targets, the male friend and female friend targets of the high and low defensive subjects were compared using a correlated t test to measure the significance of differences between the means of the high and low defensive groups.

3. The male and female subjects were separated and separate medians found for each sex. The high and low defensive males and the high and low defensive females were classified as outlined above. The groups formed were compared as to rates of self-disclosure as described in step 2.





### Hypothesis IX.

1. Each subject's score on the Marlowe Crowne Social Desirability Scale was obtained. The median score was found and subjects whose scores were above the median were designated as being high defensive just as those subjects whose scores were below the median formed the low defensive group.

2. The pre-treatment and posttest measures of defensiveness for the high defensive subjects were compared across the three experimental conditions using an analysis of variance technique.

### Hypothesis X.

1. The pre-test mean intimacy value for each of the 21 Self Disclosure Questions was computed and then each question ranked in order of assigned mean intimacy value.

2. The seven items ranked most highly intimate were classified as being the highly intimate items for this population.

3. The means and standard deviations of the 7 items were calculated for the post treatment data.

4. Analysis of variance procedures were used to compare the differences between the pre-treatment and post treatment measures for the total groups in each experimental condition and for each experimental condition by sex.



## VI. LIMITATIONS OF THE STUDY

This thesis was restricted to the study of self-disclosure in sensitivity training and its effect upon risk taking attitude as moderated by anxiety and defensiveness. Related to the nature of this study are several limitations.

The variables under study are difficult to measure. The instruments chosen are among the most reliable available for the purpose. On the dimension of self-disclosure, it may be argued that the subjects would not want to honestly report areas of self-disclosure, nor accurately rate items of an intimate nature. However, for the purpose of this study, self-concealment and self-disclosure are conceived as being poles of a continuous dimension. The study was concerned with the degree to which an individual conceals or reveals himself and the effects of sensitivity training upon a person's willingness to modify his level of functioning on this dimension.

The amount of time involved in the sensitivity training condition posed another limitation upon the study. The project took place over an eight week period between February 2 and March 23, 1969. It was also not known if eight weeks (16 hours) of sensitivity training would be sufficient to produce the cohesive functional group that would allow the participants to engage in self-disclosure.





The success of the study rested upon the subjects in the sensitivity training sessions feeling secure enough to disclose themselves. It was also appreciated that over such a period of time spontaneous changes could occur in the subjects, but it was thought that through randomization procedures all of the subjects would have the same opportunity of having this occur to them regardless of what experimental condition they were assigned to.

With the success of the study resting on the availability of conditions conducive to self-disclosure the role of the three trainers became very important. The use of three different trainers posed the problem of the effects of their personalities and their own group leadership styles. In an effort to make the three groups as similar as possible the three trainers had similar educational background and group experience. They were supplied with an operational manual (Appendix J) to serve as a focus and guideline for the groups functioning.

In all studies of group functioning, the operation of the individual's personality factors can produce spurious effects. A variety of personality traits have been shown to influence risk taking. In so far as only defensiveness and anxiety level were studied, it is possible and highly probable that other personality factors exerted their influences. It was thought that randomization of the subjects to the three treatment conditions would





exert control over this spurious variance.

The study of self-disclosure and risk taking is a relatively new area in the realm of personality research and as such is performed with few of the guidelines of replicative research.



## CHAPTER IV

### RESULTS

#### I. RESULTS OF HYPOTHESIS TESTING

Hypothesis I. A risky-shift was produced by means of the standardized non-consensus discussion method (Appendix I). The shifts in risk taking from pre-test to posttest measure on the twelve item scale (CDP); the two items (5 and 12) reported to have tendency to move towards caution; and the 10 item scale (minus items 5 and 12) are described by Table V.

TABLE V

#### SHIFT IN RISK TAKING PRODUCED BY CLASSICAL PROCEDURE

| INSTRUMENT        | N  | PRE-TEST |       | POSTTEST |       | SHIFT  | t     | p       |
|-------------------|----|----------|-------|----------|-------|--------|-------|---------|
|                   |    | MEAN     | S.D.  | MEAN     | S.D.  |        |       |         |
| 12 item<br>CDP    | 31 | 69.19    | 12.91 | 62.81    | 13.58 | -6.38* | -3.75 | .0005** |
| 10 item<br>CDP    | 31 | 54.58    | 11.42 | 48.07    | 12.81 | -6.51  | -3.98 | .0000   |
| Items<br>5 and 12 | 31 | 14.61    | 3.03  | 14.74    | 3.25  | +0.13  | +0.23 | ns      |

\* Negative sign indicates an increase in riskiness.

\*\* One tailed test.

The correlated t test was used to test the significance of the difference between the means of the pre-test and after



discussion test for the 31 "C" group subjects who were randomly selected to demonstrate the risky-shift effect.

Items 5 and 12 on the Choice Dilemmas Procedure, which are reported (Wallach, Kogan, & Bem, 1964; Teger and Pruitt, 1967; and Jamieson, 1968) to show a move toward caution were deleted and the remaining 10 items were analyzed separately. The two conservative items (5 and 12) moved towards increased caution but not significantly.

Both the 12 item and the 10 item versions of the Choice Dilemmas Procedure measured a significant change in the direction of greater risk taking, thus confirming the hypothesis, that a risky-shift could be produced in groups of University of Alberta Faculty of Education undergraduate students.

Analysis of the data obtained from the 21 risky-shift subjects who returned for the posttesting yielded similar significant results as described in Table VI.

The hypothesis that a risky-shift could be classically produced in a sample of University of Alberta Education undergraduates was confirmed.





TABLE VI

SHIFT IN RISK TAKING PRODUCED BY CLASSICAL  
PROCEDURE WITH SUBSAMPLE OF SUBJECTS

| INSTRUMENT        | N  | PRE-TEST |       | POSTTEST |       | SHIFT  | t     | p     |
|-------------------|----|----------|-------|----------|-------|--------|-------|-------|
|                   |    | MEAN     | S.D.  | MEAN     | S.D.  |        |       |       |
| 12 Item<br>CDP    | 21 | 69.19    | 13.00 | 64.67    | 12.34 | -4.52* | -2.08 | .03** |
| 10 Item<br>CDP    | 21 | 54.52    | 11.63 | 50.00    | 11.94 | -4.52  | -2.19 | .02   |
| Items<br>5 and 12 | 21 | 14.67    | 3.06  | 14.67    | 3.44  | 0.0    | 1.00  | ns    |

\* Negative sign indicates an increase in riskiness.

\*\* One tailed test.

Hypothesis II. The sensitivity training group participants did not significantly increase their level of riskiness as was predicted. The post treatment mean risk taking score of the sensitivity training group moved in the direction of greater riskiness, but failed to reach a level of significance. The pre-test and posttest means of the three experimental conditions on the 12 item CDP are described in Table VII.



TABLE VII

## PRE-TEST AND POSTTEST MEAN DIFFERENCES IN RISK TAKING

| CONDITION                  | N  | PRE-TEST<br>MEAN | S.D.  | POSTTEST<br>MEAN | S.D.  | SHIFT  |
|----------------------------|----|------------------|-------|------------------|-------|--------|
| A. Sensitivity<br>Training | 26 | 72.55            | 15.68 | 69.54            | 16.32 | -3.00* |
| B. Control                 | 25 | 66.56            | 18.37 | 68.88            | 13.95 | +2.32  |
| C. Risky-shift             | 21 | 69.19            | 13.32 | 65.52            | 13.00 | -3.67  |
| Total Sample               | 72 | 69.49            | 15.92 | 68.14            | 14.39 | -1.35  |

\* Negative number indicates increased riskiness.

The analysis of variance yielded nonsignificant results as summarized in Table VIII.

TABLE VIII

## SUMMARY OF ANALYSIS OF VARIANCE

| SOURCE                        | SS       | df | MS     | F     | p  |
|-------------------------------|----------|----|--------|-------|----|
| Between<br>Subjects           | 24425.50 | 71 |        |       |    |
| 'A' Main<br>Effects           | 392.61   | 2  | 196.30 | 0.564 | ns |
| Subjects Within<br>Groups     | 24019.25 | 69 | 348.11 |       |    |
| Within<br>Subjects            | 8802.50  | 72 |        |       |    |
| 'B' Main Effects              | 75.66    | 1  | 75.68  | 0.616 | ns |
| 'A*B'<br>Interaction          | 255.14   | 2  | 127.57 | 1.038 | ns |
| 'B'x Subject<br>Within Groups | 8477.13  | 69 | 122.86 |       |    |



The pre-test post treatment test differences on risk taking attitude were analyzed separately for sex differences using repeated measures analysis of variance procedures. In view of the significant interaction effect ( $p < .009$ ) described in Table IX and diagrammed in Figure 3, a simple effects test was applied.

TABLE IX

PRE-TREATMENT AND POSTTEST RISK TAKING DIFFERENCES ANALYZED  
SEPARATELY BY SEXES: SUMMARY ANALYSIS OF VARIANCE

| SOURCE                           | SS       | df | MS     | F    | p     |
|----------------------------------|----------|----|--------|------|-------|
| Between<br>Subjects              | 24425.50 | 71 |        |      |       |
| 'A' Main<br>Effects              | 561.12   | 5  | 112.23 | 0.31 | 0.91  |
| Subjects<br>Within<br>Groups     | 23838.81 | 66 | 361.19 |      |       |
| -----                            |          |    |        |      |       |
| Within<br>Subjects               | 8802.50  | 72 |        |      |       |
| 'B' Main<br>Effects              | 0.69     | 1  | 0.69   | 0.01 | 0.94  |
| 'A*B'<br>Interaction             | 1865.91  | 5  | 373.18 | 3.44 | 0.009 |
| 'B'x Subject<br>Within<br>Groups | 7167.56  | 66 | 108.60 |      |       |





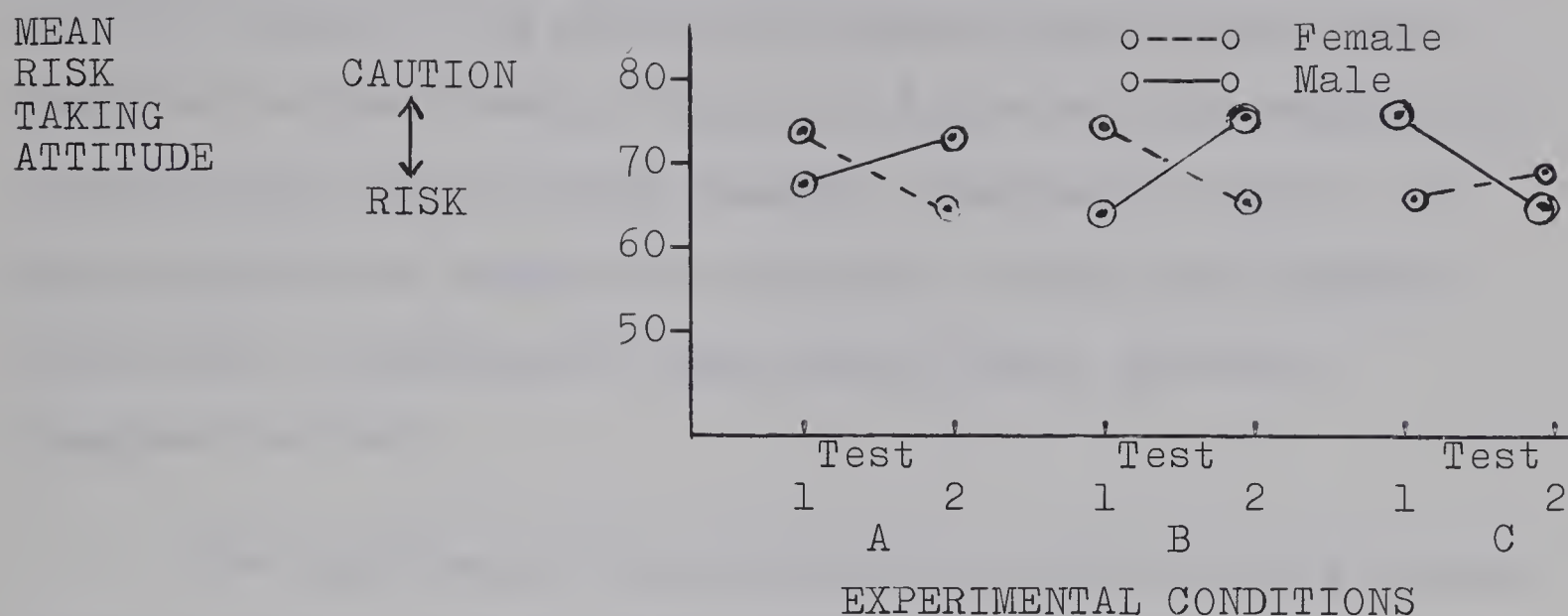


Figure 3. Interaction effect of sex and risk taking attitude over time.

The males ( $n = 9$ ) in the sensitivity training condition became insignificantly more cautious and the females became insignificantly more risky. The same pattern existed with the control group males ( $n = 8$ ) becoming significantly ( $p < .005$ ) more cautious and the control group females ( $n = 17$ ) becoming insignificantly more risky. This trend was not existent in the risky-shift group where the males ( $n = 10$ ) were significantly ( $p < .02$ ) more risky and the females insignificantly more cautious. The simple effect findings are presented in Table X.

The analysis of variance results of the ten item CDP failed to produce significant overall treatment main effects or interaction effects. A significant ( $p < .05$ ) interaction effect was found in the analysis of variance of the cautious drag items (5 and 12) when sex differences were controlled. No pre-test and post treatment differences were found for the male subjects; however, the female sensitivity training subjects ( $p < .009$ ) and the female



control subjects ( $p < .008$ ) both became significantly more risky as is described in Table X. Since both the sensitivity training and control group females essentially exhibit the same significant change over time the result would appear to be more a function of time rather than a specific treatment effect.

The hypothesis that sensitivity training would produce a change in risk taking attitude in the risk direction was not confirmed by the data.

TABLE X

TREATMENT EFFECTS UPON RISK TAKING ATTITUDE  
OF MALE AND FEMALE SUBJECTS

| EXPERIMENTAL<br>CONDITION | SEX | n  | TOTAL<br>MS | CDP<br>F | p*   | ITEMS<br>MS | 5 & 12<br>F | p*   |
|---------------------------|-----|----|-------------|----------|------|-------------|-------------|------|
| Sensitivity<br>Training   | M   | 9  | 8.0         | .07      | ns   | 8.0         | 1.32        | ns   |
|                           | F   | 17 | 238.24      | 2.19     | ns   | 36.03       | 5.95        | .009 |
| Control                   | M   | 8  | 770.06      | 7.09     | .005 | 6.25        | 1.03        | ns   |
|                           | F   | 17 | 82.62       | .76      | ns   | 38.12       | 6.29        | .008 |
| Risky<br>Shift            | M   | 10 | 510.05      | 4.70     | .02  | 16.2        | 2.68        | ns   |
|                           | F   | 11 | 26.18       | .24      | ns   | .18         | .03         | ns   |

\* One tailed test.

Hypothesis III. It was predicted that a positive relationship would be found between self-disclosure rate and risk taking attitude. A small product moment correlation coefficient ( $r = .07$ ) was found between high total self-disclosure and



low risk taking. A significant correlation ( $r = .20$ ,  $p < .05$ ) was found between amount of self-disclosure to the female friend target and low risk taking. No significant relationship was found to exist between the male friend target or total targets and risk taking for the total sample ( $N = 72$ ).

No significant correlations were found for the small sample of 13 single males. In the case of the married male subjects, ( $n = 14$ ) significant correlations as described in Table XI were found between high self-disclosure and risk taking as measured by the CDP when the cautious drag items 5 and 12 were removed.

TABLE XI

THE RELATIONSHIP OF SELF-DISCLOSURE AND RISK TAKING IN  
MARRIED MALES

| Self-Disclosure<br>Targets | TOTAL<br>CDP                   | ITEMS<br>5 & 12              | RISK<br>10                            |
|----------------------------|--------------------------------|------------------------------|---------------------------------------|
| SD. MALE<br>FRIEND         | r $-.001$<br>t $-.003$<br>p ns | r $-.10$<br>t $-.33$<br>p ns | r $-.63$<br>t $-2.80$<br>p $< .005^*$ |
| SD. FEMALE<br>FRIEND       | r $-.009$<br>t $-.03$<br>p ns  | r $-.26$<br>t $-.94$<br>p ns | r $-.55$<br>t $-2.26$<br>p $< .03^*$  |
| Total<br>Targets           | r $-.25$<br>t $-.90$<br>p ns   | r $-.21$<br>t $-.73$<br>p ns | r $-.53$<br>t $-2.16$<br>p $< .03^*$  |

\* One tailed test.





High self-disclosure is associated with high risk taking in married male subjects.

Due to the very small number of married females in the sample ( $n = 3$ ) analysis of married female data was not feasible. In the case of single females ( $n = 42$ ) a significant correlation ( $r = .31$ ,  $p < .03$ ) was found between high self-disclosure to female friend target and low risk taking. No significant correlations were obtained between male friend target or total disclosure rate and risk taking attitude for the single female sample.

Hypothesis IV. The sensitivity training group participants ( $n = 26$ ) significantly ( $p < .05$ ) increased their amount of self-disclosure to the male friend target. Although there was an increase in the amount of self-disclosure to the male friend target by the control and risky-shift groups, neither reached significance.

The sensitivity training group subjects ( $n = 26$ ) significantly ( $p < .007$ ) increased their amount of self-disclosure to the female friend target, while neither the control nor risky-shift groups did the same.

Table XII describes the results of the simple effects test which followed the obtainment of an overall treatment effect on the analysis of variance ( $F$ -ratio 4.37,  $p < .04$ , for female friend and  $F$ -ratio 3.91,  $p < .05$  for male friend).



TABLE XII

TREATMENT EFFECTS UPON RATE OF SELF-DISCLOSURE  
TO SELECTED TARGETS

| EXPERIMENTAL<br>CONDITION | MALE FRIEND |      |     | FEMALE FRIEND |       |       |
|---------------------------|-------------|------|-----|---------------|-------|-------|
|                           | MS          | F    | p   | MS            | F     | p     |
| Sensitivity<br>Training   | 421.231     | 4.00 | .05 | 848.077       | 7.834 | .007* |
| Control                   | 0.260       | .612 | ns  | 15.68         | .145  | ns    |
| Risky<br>Shift            | 94.500      | .898 | ns  | 30.857        | .285  | ns    |

\* One tailed test.

The hypothesis that sensitivity training participants would become more self-disclosing to male friend and female friend targets was confirmed.

Hypothesis V. As predicted, high test anxious subjects were found to be significantly higher ( $p < .04$ ) risk takers than low test anxious subjects when the total test anxiety score was used as the predictor variable. The two separate scales of the AAT were analyzed independently so as to determine if facilitating or debilitating test anxiety was the better predictor of risk taking attitude. Subjects with high debilitating test anxiety were found to be significantly higher ( $p < .05$ ) risk takers than subjects with low debilitating anxiety. No significant difference was found between subjects of high or low facilitating



anxiety with regard to risk taking attitude. These results are presented in Table XIII.

TABLE XIII

## RELATIONSHIP OF TEST ANXIETY TO RISK TAKING ATTITUDE

| PREDICTOR<br>VARIABLE        | HIGH ANXIOUS<br>MEAN | S.D.  | LOW ANXIOUS<br>MEAN | S.D.  | df | t      | p     |
|------------------------------|----------------------|-------|---------------------|-------|----|--------|-------|
| Total Test<br>Anxiety        | 66.22                | 17.21 | 72.75               | 13.76 | 70 | -1.75* | .04** |
| Debilitating<br>Test Anxiety | 66.28                | 17.39 | 72.69               | 13.56 | 70 | -1.722 | .05   |
| Facilitating<br>Test Anxiety | 68.57                | 13.24 | 70.46               | 18.28 | 70 | -0.497 | ns    |

\* Negative sign indicates greater riskiness by the group with lower score.

\*\* One tailed test.

The hypothesis that high test anxious subjects are higher risk takers than low test anxious subjects was confirmed, with the debilitating anxiety scale being the better predictor.

Hypothesis VI. The high manifest anxiety subjects as a group were not found to be significantly greater risk takers than low manifest anxiety subjects. A sex difference was noted in that high manifest anxiety males ( $n = 14$ ) were significantly ( $p < .02$ ) greater risk takers than low manifest anxiety males ( $n = 13$ ). This was not found to be true for the female subjects. The results are presented in Table XIV.





TABLE XIV

## RELATIONSHIP OF MANIFEST ANXIETY TO RISK TAKING ATTITUDE

| GROUP           | HIGH ANXIOUS<br>MEAN) S.D. |       | LOW ANXIOUS<br>MEAN S.D. |       | df | t      | p     |
|-----------------|----------------------------|-------|--------------------------|-------|----|--------|-------|
| Total<br>Sample | 67.49                      | 17.32 | 71.60                    | 13.99 | 70 | -1.09* | ns    |
| Males           | 61.71                      | 19.68 | 75.31                    | 11.46 | 25 | -2.09  | .02** |
| Females         | 71.00                      | 14.63 | 69.41                    | 14.86 | 43 | .35    | ns    |

\* Negative sign indicates greater riskiness by the group with lower score.

\*\* One tailed test.

Hypothesis VI was only partially confirmed in that a positive relationship between high manifest anxiety and high risk taking was found to be true only for males.

Hypothesis VII. The prediction that high defensive subjects would be high risk takers was not confirmed. High defensive subjects, in general, were not found to differ significantly in their risk taking attitude from low defensive subjects. When the total group of high defensive ( $n = 37$ ) subjects were compared to the total group of low defensive subjects ( $n = 35$ ) their test mean on the risk taking scale was indicative of greater riskiness however it failed to reach significance as Table XV indicates. When sex differences were partialled out neither the high defensive males nor the high defensive females differed significantly from



the low defensive males or females respectively on the 12 item measure of risk taking attitude. However, the high defensive males ( $n = 14$ ) were found to be significantly ( $p < .05$ ) lower risk takers than the low defensive males ( $n = 13$ ) on the "cautious" two item subscale.

TABLE XV

## RISK TAKING ATTITUDE OF HIGH AND LOW DEFENSIVE SUBJECTS

| SAMPLE | SCALE        | HIGH DEFENSIVE |       | LOW DEFENSIVE |       | df | t     | p*  |
|--------|--------------|----------------|-------|---------------|-------|----|-------|-----|
|        |              | MEAN           | S.D.  | MEAN          | S.D.  |    |       |     |
| Total  | 12 item      | 71.03          | 17.39 | 67.86         | 14.02 | 70 | 0.837 | ns  |
|        | Items 5 & 12 | 15.43          | 2.99  | 14.34         | 3.17  | 70 | 1.479 | ns  |
|        | 10 item      | 58.30          | 12.41 | 53.51         | 13.30 | 70 | 1.557 | ns  |
| Male   | 12 item      | 69.71          | 20.70 | 66.69         | 13.34 | 25 | 0.430 | ns  |
|        | Items 5 & 12 | 16.50          | 2.67  | 14.15         | 3.80  | 25 | 1.797 | .05 |
|        | 10 item      | 60.36          | 11.17 | 52.54         | 13.21 | 25 | 1.602 | ns  |
| Female | 12 item      | 71.83          | 14.96 | 68.55         | 14.36 | 43 | 0.733 | ns  |
|        | Items 5 & 12 | 14.78          | 2.99  | 14.45         | 2.73  | 43 | 0.375 | ns  |
|        | 10 item      | 57.09          | 12.95 | 54.09         | 13.31 | 43 | 0.737 | ns  |

\* One tailed test.



Hypothesis VIII. The hypothesis that high defensiveness, defined as high score on the Marlowe Crowne Social Desirability scale, would be associated with low rates of self-disclosure was not confirmed.

No significant difference was found to exist between amounts of self-disclosure to male friend, female friend, or to total targets for high and low defensive subjects when the data from the total sample was analyzed and no sex differences were isolated. The statistical results are presented in Table XVI.

TABLE XVI

## THE EFFECTS OF DEFENSIVENESS UPON SELF-DISCLOSURE

| GROUP   | SELF<br>DISCLOSURE<br>TARGET | HIGH   |       | LOW    |       | df | t     | p  |
|---------|------------------------------|--------|-------|--------|-------|----|-------|----|
|         |                              | MEAN   | S.D.  | MEAN   | S.D.  |    |       |    |
| Total   | Male Fr.                     | 62.68  | 23.81 | 65.20  | 21.10 | 70 | -.47  | ns |
|         | Female Fr.                   | 67.73  | 23.02 | 67.46  | 18.19 | 70 | .06   | ns |
|         | Total<br>Targets             | 256.22 | 73.19 | 267.60 | 73.45 | 70 | -.65  | ns |
| Males   | Male Fr.                     | 66.07  | 19.97 | 69.54  | 21.35 | 25 | -.42  | ns |
|         | Female Fr.                   | 58.21  | 24.43 | 59.08  | 17.40 | 25 | -.10  | ns |
|         | Total<br>Targets             | 257.21 | 80.55 | 294.54 | 64.37 | 25 | -1.27 | ns |
| Females | Male Fr.                     | 60.61  | 25.65 | 62.64  | 20.52 | 43 | -.29  | ns |
|         | Female Fr.                   | 73.52  | 20.01 | 72.41  | 16.78 | 43 | .20   | ns |
|         | Total<br>Targets             | 255.61 | 68.32 | 251.68 | 73.83 | 43 | .18   | ns |





Hypothesis IX. Sensitivity training did not produce a significant reduction of defensiveness in the high defensive subjects as can be seen from an inspection of Table XVII.

TABLE XVII

## PRE-POST TREATMENT DIFFERENCES IN HIGH DEFENSIVE SUBJECTS

| EXPERIMENTAL<br>CONDITION | N  | PRE-TREATMENT<br>MEAN | S.D. | POST TREATMENT<br>MEAN | S.D. |
|---------------------------|----|-----------------------|------|------------------------|------|
| Sensitivity<br>Training   | 12 | 17.33                 | 2.53 | 16.50                  | 4.50 |
| Control                   | 13 | 17.77                 | 2.83 | 16.85                  | 4.10 |
| Risky<br>Shift            | 12 | 18.83                 | 3.51 | 18.25                  | 3.44 |

Analysis of variance yielded a non-significant F-ratio of 2.39 for the main treatment effect.

The hypothesis that sensitivity training would produce a significant reduction in defensiveness for high defensive subjects was not confirmed.

Hypothesis X. Sensitivity training did not produce a significant reduction in the mean intimacy value of items previously rated highly intimate. Table XVIII presents the pre-treatment and post treatment means of the items rated highly intimate, an inspection of which indicates no significant difference.



TABLE XVIII

CHANGES IN MEAN INTIMACY VALUE OF SELF-DISCLOSURE QUESTIONS  
RATED HIGHLY INTIMATE

| EXPERIMENTAL            | N  | PRE-TEST<br>MEAN | S.D. | POSTTEST<br>MEAN | S.D. |
|-------------------------|----|------------------|------|------------------|------|
| Sensitivity<br>Training | 26 | 16.35            | 6.19 | 16.81            | 5.78 |
| Control<br>Group        | 25 | 17.28            | 7.26 | 17.44            | 6.23 |
| Risky<br>Shift          | 21 | 17.81            | 6.46 | 17.81            | 8.24 |
| Total<br>Sample         | 72 | 17.10            | 6.59 | 17.32            | 6.64 |

Analysis of variance confirmed this observation with a non-significant main treatment effect F-ratio of 0.09 being obtained as described by Table XIX. Similarly when sex differences were controlled a non-significant main treatment effect F-ratio of 0.004 was obtained.

Hypothesis X was not confirmed, in that sensitivity training had no effect upon the intimacy value of items rated highly intimate on the Self-Disclosure Questions.



TABLE XIX

SUMMARY OF ANALYSIS OF VARIANCE: CHANGES IN MEAN INTIMACY  
VALUE OF SELF-DISCLOSURE QUESTIONS RATED HIGHLY INTIMATE

| SOURCE                        | SS      | df | MS    | F    | p    |
|-------------------------------|---------|----|-------|------|------|
| Between<br>Subjects           | 4982.75 | 71 |       |      |      |
| 'A' Main<br>Effects           | 370.05  | 2  | 18.52 | 0.26 | 0.77 |
| Subjects<br>Within<br>Groups  | 4945.70 | 69 | 71.68 |      |      |
| Within<br>Subjects            | 1235.00 | 72 |       |      |      |
| 'B' Main<br>Effects           | 1.53    | 1  | 1.53  | 0.09 | 0.77 |
| 'A*B'<br>Interaction          | 1.29    | 2  | 0.65  | 0.04 | 0.97 |
| 'B'x Subject<br>Within Groups | 1231.91 | 69 | 17.85 |      |      |

## II. ANCILLARY FINDINGS

This section presents some subsidiary findings that do not constitute part of the research design for the hypothesis testing. The findings are of particular relevance to any study that is designed to modify test anxiety as measured by the Achievement Anxiety Test (Alpert and Haber, 1960)





Analysis of the differences between the pre-test and posttest measure of total achievement anxiety yielded a highly significant main effect ( $F$ -ratio = 14.317,  $p < .0004$ ) but without any interaction effect between the experimental groups. There was no significant difference between groups but an overall increase in the level of achievement anxiety for all subjects was evident. The analysis of variance results are described by Table XX.

A correlation between manifest anxiety and debilitating anxiety of .37 ( $p < .002$ ) was found for the total sample ( $N = 72$ ; females = 45, males = 27). The facilitating and debilitating scales of the AAT were found to be negatively correlated for the total sample with  $r = -.35$  ( $p < .003$ ).

A correlation between facilitating anxiety and total self-disclosure to male friend target of .33 ( $p < .005$ ) was found for the total sample. While this correlational relationship did not hold for the males, either single or married, the correlation of .32 remained significant ( $p < .04$ ) for single females. No significant correlations were obtained between debilitating anxiety and self-disclosure rates.



TABLE XX

CHANGES IN TOTAL ACHIEVEMENT ANXIETY OVER TIME  
SUMMARY OF ANALYSIS OF VARIANCE

| SOURCE                           | SS       | df | MS      | F      | p      |
|----------------------------------|----------|----|---------|--------|--------|
| Between<br>Subjects              | 2912.500 | 71 |         |        |        |
| 'A' Main<br>Effects              | 156.708  | 2  | 78.354  | 1.961  | 0.15   |
| Subjects<br>Within<br>Groups     | 2756.937 | 69 | 39.956  |        |        |
| Within<br>Subjects               | 1046.500 | 72 |         |        |        |
| 'B' Main<br>Effects              | 179.759  | 1  | 179.759 | 14.317 | 0.0004 |
| 'A*B'<br>Interaction             | 0.093    | 2  | 0.046   | 0.004  | 0.996  |
| 'B'x Subject<br>Within<br>Groups | 866.313  | 69 | 12.555  |        |        |



## CHAPTER V

### DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

#### I. DISCUSSION OF RESULTS OF HYPOTHESIS TESTING

The data supported the opening hypothesis that a risky-shift could be classically produced in a Western Canadian sample of university education undergraduates. This finding adds support to the belief that this phenomenon is not a spurious effect produced in a particular type of group since larger groups of mixed sexes were used in this study.

The operation of the moderating effects of achievement anxiety upon risk taking attitude was found to be especially significant as related to debilitating test anxiety. This finding has important consequences in the field of education when one considers that students made highly anxious are prone to greater risk taking with concomitant greater opportunity for failure. It casts serious doubts upon the advisability of using debilitating anxiety as a motivating force for higher academic achievement.

While the hypothesis that sensitivity training would produce a risky-shift was not confirmed, some interesting findings emerged from inspection of sex differences concerning self-disclosure rate and attitude towards cognitive risk taking. It is apparent that sex differences exert a very significant effect upon the





moderating variables of manifest anxiety and achievement anxiety as they are related to risk taking attitude and self-disclosure. This finding carries with it implications as to the composition of groups used for research projects as well as in applied situations in school and clinical setting alike.

Research has been needed and still is required in the area of demonstrating effects that sensitivity training has upon participants. This study makes a contribution in that vein by producing data which significantly demonstrated the effects of sensitivity training upon self-disclosure rate. Replication of this type of research with clinical populations would add further support to the position that self-disclosure is the means to establish a more healthy personality.

The rejection of the hypotheses that defensiveness operates as a moderator personality variable upon cognitive risk taking and that sensitivity training would reduce defensiveness raises questions about the nature of the variable and its measurement. It may very well be that demonstration of the effect of sensitivity training upon defensiveness must await development of more effective measure of this personality variable.

The results of the study have implications for the educational process, both in the classroom and in the counselors office.



1. Production of the risky-shift. The production of a significant shift in risk taking attitude towards greater riskiness by means of the classical method of non-consensus group discussion (Kogan and Wallach, 1964) provided a base for determining if a risky-shift could be obtained by means other than the actual discussion of the Choice Dilemmas Procedure items. It is of importance to note that this shift was obtained in heterogeneously mixed groups by sex and in groups of a larger size than is normally used for this purpose (Kogan and Wallach, 1964; Rim, 1963, 1964; Wallach and Kogan, 1965; Hoyt and Stoner, 1968; Jamieson, 1968; and Stoner, 1968).

The finding that the risky-shift phenomenon can be demonstrated to occur in a heterogeneous group of Canadian university students lends support to the belief that risk taking attitude and the influence upon it of group discussion is a relatively robust phenomenon. It has been demonstrated across several cultural groups in selected samples from New Zealand (Jamieson, 1968), Israel (Rim, 1963, 1964), and in the United States (Stoner, 1961; Wallach, Kogan and Bem, 1962; Kogan and Wallach, 1964; Teger and Pruitt, 1967). The results of this study indicated that a shift in risk taking attitude can be produced in a sample of Canadian university undergraduates.



The demonstration of the risky-shift phenomenon across several different cultural systems suggests that it may not be so much a reflection of an American cultural value as Brown (1965), Teger and Pruitt (1967) and Wallach and Wing (1968) imply. It may reflect the participants involvement in the inclusion phase (Schutz, 1966) of group development. This conclusion supports Brown's (1965) contention that the risky-shift occurs because the group members want to appear slightly more risky than what they perceive the group norm to be, but only as it is related to the functioning of the micro-culture being formed within the discussion group. Schutz (1966) describes the inclusion phase as beginning with the formation of the group. He states that:

When people are confronted with one another they first find the place where they fit. This involves being in or out of the group....Each member is implicitly deciding to what degree he shall become a member of the group--how much investment he will withdraw from his other commitments and invest in this new relation. [p. 169]

Early in the formation of the group the individual must decide the extent to which he will risk investing a portion of himself in this new group experience, ie., his opinion about risk taking situations, in order that he may be included as a member of the group. Stoner (1968) reviewed risk taking research since his original 1961 work and summarizes the major theoretical positions. He concluded that the results of his most recent research appears to be more consistent with the value of risk





hypothesis, but for the first time raises the question of whether it is a "true cultural value" or not. He acknowledges, however, that there appears to be widespread differences in the professed personal value attached to riskiness in various experimental populations. The data supporting the opening hypothesis and Stoner's conclusions suggest that the risky-shift may reflect the operation of the inclusion phase of group development. The hypothesis that the risky-shift phenomenon reflects the inclusion phase of group development does not replace but complements the value of risk hypothesis as explanation for the shift in risk taking attitude resulting from discussion of risky material in a group setting.

2. Sensitivity training did not produce a significant shift in risk taking. Hypothesis II was derived from the theoretical position that an implicit display of riskiness through self-disclosure would produce a significant shift in risk taking attitude. It was thought that the act of self-disclosure would constitute the type of information, which upon exchange in the group situation, would satisfy the demands of the information exchange explanation of the risky-shift. Two of three possible explanations of the negative results are that; cognitive risk taking attitude is not related to self-disclosure, or self-disclosure in the sensitivity



training sessions is not risky. The third possibility is that while self-disclosure may be related to riskiness in the early developing stages of new groups, it may lose its riskiness as the sensitivity training group moves through developmental phases to the point of trusting affectionate interchange where risk will be minimal.

Acceptance of Kogan and Wallach's (1964) findings that high risk taking is associated with high degrees of anxiety leads to the conclusion that if sensitivity training succeeds in reducing anxiety then a concomitant reduction in risk taking may take place. This would be especially true if anxiety acts as moderator variable. Lubin and Zuckerman (1967), in studying the affective and perceptual cognitive patterns in sensitivity training groups, found that as feelings were shared more openly the participants reported less anxiety. Although it is extremely hazardous to speculate about the decrease in anxiety levels and its effect in the present study the existence of such a possibility lends credence to the position adopted that the sensitivity training produced the effect of reducing the anxiety associated with self-disclosure perhaps because it lost some of its riskiness over the eight weeks of sensitivity training. Weschler et al (1965) provide support for this interpretation in their comments about group functioning. They indicate that



as participants overcome their initial anxiety and learn the rules of the new game, ie., that self-disclosure is acceptable and encouraged, they appreciate that there is less risk in failure and greater payoff in making what were initially risky decisions by engaging in self-disclosure.

It seems reasonable that if self-disclosure becomes less risky as the group matures that participants in the late sensitivity training sessions will not perceive the later acts of self-disclosure as reflecting risk taking attitude. If self-disclosure does not reflect riskiness in the later periods of the life of a sensitivity training group then information about individual levels of riskiness that could have been received in the early life of the group will have lost its significance.

While hypothesis II was not confirmed, some interesting findings emerged from inspection of sex differences in both the control and experimental groups. While the nine males in the sensitivity training condition did not exhibit greater riskiness at the posttest they did not become more cautious as did the eight control group males. The ten males in the classical risky-shift condition maintained their greater riskiness. The results on the total CDP measure of risk taking for the females were not significant. When





the two cautious drag items were analyzed separately, both the sensitivity training group female subjects and the control group females became more risky.

Since both groups exhibited essentially the same change it seems reasonable to interpret the results as being more a function of time rather than attributing it to a specific treatment effect. Similarly the interpretation of change on what really constitutes a two-item test is of doubtful value.

### 3. Risk taking attitude as related to self-disclosure.

It was predicted that a significant positive relationship would exist between high self-disclosure and high risk taking. The data do not support this prediction but rather provide some evidence to the contrary when sex differences are controlled. The obtainment of the predicted result with the small sample of married males ( $n = 14$ ) is acceptable when one considers that the targets analyzed from the Self-Disclosure Questionnaire did not include spouses, but only male and female friends and a total of all targets. High self-disclosure is associated with high risk taking for married males. This may reflect a cultural credo that married males share personal information with their wives but not indiscriminantly with other friends outside of the marriage. Jourard's (1964) finding that married people disclose more to the marital partner than to other targets has a bearing upon this finding,



especially when the concomitant finding was that there was no increase in the total amount of self-disclosure simply a reorientation of direction. It would appear then that risk taking attitude and self-disclosure were unrelated for the single males while self-disclosure became significantly related to risk taking attitude for the married male. Jourard's (1961) finding of a gradual decrease in self-disclosure rate to parental targets and to same sexed friend with age for married persons lends support to the suggestion that it is not the socially accepted norm to disclose significant aspects of oneself to persons outside of the marriage. The amount of self-disclosure to the opposite sexed friend or spouse increased with age. It would appear from the data obtained from this study that it is more risky for married males ( $r = -.63, p < .005$ ) to disclose to same sexed targets than to opposite sexed targets ( $r = -.55, p < .03$ ). It could be that societal norms dictate that disclosure of personally relevant material outside of marriage is not approved of for the married male and therefore risky, while it is acceptable behaviour for the unattached male. Because of the lack of married females in the sample it is only possible to speculate on what the results may have been. In view of the finding that high self-disclosure to female friend is significantly related to low risk taking for single females one could speculate that



this would also exist in married life. This speculation has some basis in the observations of the close personal friendships that exist after marriage for many women which do not exist for men. It is as if, in our society, an edict exists that men solve their own problems and do not share matters of personal concern with others for fear of appearing inadequate in the eyes of their peers. Women are granted this privilege by being thought of as the weaker sex.

4. The effect of sensitivity training upon self-disclosure rate. The obtainment of the significant results for hypothesis IV provides some evidence as to the validity of the theory supporting the use of sensitivity training as a means of increasing interpersonal competence. This supports Lakin and Carson's (1966) belief that sensitivity training is a therapeutic vehicle having equal applicability to people with and without behaviour disorders. This is especially true if Jourard (1959) is correct in stating that self-disclosure is the means of achieving and maintaining a "healthy personality." Bach (1967) applied sensitivity training principles in Marathons with clinical patients and found that the openness to personal experience gained through self-disclosure and confrontation produced what was reported by the patients as "...one of the most significant and meaningful experiences of their lives." [p. 1147]





The data obtained in this study describe a significant demonstrable effect of sensitivity training. This is especially significant since it is apparently an effect that was transferred outside of the group influence since the targets of increased self-disclosure were not participants in the group. It seems possible that the experience of trust relationships within the sensitivity training group, where self-disclosure became the norm of functioning, enabled the participants to form more trusting relationships outside of the group. It is thought that the development of the trusting relationships outside of the group led to increased self-disclosure to selected targets.

5. Achievement anxiety is related to risk taking attitude. Subjects scoring high on a measure of achievement test anxiety were found to be significantly higher risk takers than those scoring low on achievement test anxiety. The data support the conclusions of Rim (1963) and Kogan and Wallach (1965), supplementing their findings by delineating that it is those subjects high in debilitating test anxiety who are the high risk takers as compared with those subjects high on a measure of facilitating achievement anxiety. Kogan and Wallach noted the self-defeating aspect of the judgements made by highly anxious subjects which tends to place them in the position of being prone to further failure and the



possibility of even greater levels of anxiety. It follows that due to the greater experience of failure that a greater need for achievement would also exist. Rim's data support the conclusion that subjects with a high need for achievement are high risk takers; however, without support of data he states that the subject with low need for achievement is "consequently highest in 'fear of failure'." [p. 113] The contrary seems to be a more accurate interpretation of the present findings. The person with high levels of debilitating test anxiety, through his frequent experience of failure due to taking unwarranted risks, would seem to be the person who would fear failure the most and possess a high need for achievement.

6. Manifest anxiety is related to risk taking attitude differentially depending upon the sex of subjects. Only partial confirmation of the predicted relationship between high manifest anxiety and high risk taking was obtained from the data. High manifest anxiety males were found to be high risk takers. This was not found to be true for female subjects.

This finding may reflect a societal norm concerning socially acceptable behaviour for females different from what is acceptable sex typed behaviour for males. Persons' scoring high on the measure of manifest anxiety are described by Hoyt and Magoon (1954) as being:



...(a) Nervous (i.e., mannerisms such as nail biting, knuckle cracking, chain smoking; profuse perspiration; etc.); (b) Tense (i.e., ...hand trembling, tics, etc.); (c) Easily embarrassed...; (d) Worried, .... [p. 358]

The exhibition of these traits by males would not be considered in keeping with commonly accepted concepts of masculinity. These traits appear to be more socially acceptable when exhibited by women. It seems reasonable that men who report many high manifest anxiety symptoms would also be striving to improve their image of themselves. They would in turn be more risky in their behaviour due to the desperateness of their need to be seen as attempting to cope with their behavioural problems. It is socially more acceptable for women to cautiously await help from an external source. Baron's (1968) findings that belief in external control of reinforcement correlates ( $r = .37$ ,  $p < .01$ ) significantly with conservative behaviour in risk taking situations provides some support for this explanation.

These findings suggest that high manifest anxiety males should be counseled in a manner so as to reduce their tendency towards high risk taking. It may be helpful for the school counselor to adopt a directive approach so that decision making is temporarily removed from the responsibilities of the high manifest anxiety male counselee. This procedure could have the effect of breaking the circularity of the neurotic involvement between high manifest anxiety and high risk





taking. The student could then be taught a less risky approach to decision making allowing for a decrease in the amount of manifest anxiety experienced. The reduction in manifest anxiety would serve to improve their masculine image and hopefully improve their interpersonal effectiveness.

7. Defensiveness was not found to be related to risk taking attitude. Kogan and Wallach (1964) defined "defensiveness" as an unwillingness to be involved in affective interpersonal exchanges which may threaten a person's image of himself. If social risks have anything to do with cognitive risk taking then the link should be found in test anxious defensive subjects. For female subjects the influence of defensiveness upon risk taking attitude was found by Kogan and Wallach to be negligible especially with women who are independent.

The absence of significant findings in the present study may be a function of the majority of the subjects being female with the tendency to not associate defensiveness and risk taking.

The obtainment of a significant difference between high and low defensive males on the dimension of risk taking as measured by the two item cautious sub scale is suspect as a spurious result due to the small sample



size and the small number of items in the measure. It must also be considered that one significant result out of nine tests using the same data could occur by chance alone. The acceptance of this finding must be tempered with some degree of caution and await replication.

8. Defensiveness was not found to be related to self-disclosure rate. "Defensiveness" was found by Kogan and Wallach (1964) to exert only a negligible influence upon cognitive risk taking. The data support the conclusion that the same is true for the relationship between "defensiveness" and self-disclosure rate. Kogan and Wallach (1964) did not claim any universality to the efficacy of defensiveness as a moderator variable related to cognitive risk taking. Defensiveness has not found to exert any significant effect upon risk taking attitude or self-disclosure rate in the present study.

The data of the present study raise the question as to whether the "defensiveness" dimension as defined by Kogan and Wallach (1964) and measured by the Marlowe-Crowne Social Desirability Scale (1960) has any relevance to risk taking attitude. Kogan and Wallach found significant results when both test anxiety and defensiveness were used in combination to describe levels of risk taking. While the effects upon risk taking attitude of test anxiety and defensiveness,



acting in combination, were outside the scope of this study, the results nevertheless raise some doubt as to the efficacy of defensiveness as a moderator variable.

The lack of significant results would suggest that there is no relationship existant between defensiveness, as defined by Kogan and Wallach (1964), and self-disclosure rate. Kogan and Wallach used the defensiveness variable to describe "motivational disturbance" in "minimally disturbed people." Defensiveness was not found to be related to self-disclosure rate which has been found to be related to healthiness of personality (Jourard, 1964).

The use of the dimension of defensiveness, as measured by the Marlowe-Crowne Social Desirability Scale, to described a personality variable capable of having moderating effects upon either risk taking attitude of self-disclosure rate does not seem warranted in view of the present findings.

9. Sensitivity training did not reduce defensiveness in high defensive subjects. The lack of significant results in modifying what has been previously defined (Kogan and Wallach, 1964) as defensiveness suggests that either eight weeks of sensitivity training has no effect upon defensive participants or that the measure of defensiveness may not be valid. The latter conclusion is favored in view of the lack of data to





support the hypothesis of a relationship between defensiveness and risk taking attitude or self-disclosure rate. Sensitivity training has been demonstrated to be capable of increasing self-acceptance (Rubin, 1967) as well as being a means to produce increased interpersonal effectiveness in on the job personnel supervision (Underwood, 1965). It seems unlikely that highly defensive people could increase their interpersonal effectiveness without modifying their levels of defensiveness. The construct validity of the defensiveness dimension as defined by Kogan and Wallach must be subjected to further scrutiny.

10. Sensitivity training did not reduce the intimacy value of topics judged to be of a highly intimate nature.

It appears that the opportunity to discuss topics of an intimate nature in the safety of a sensitivity training groups does not mean that highly intimate topics will lose any of their intimacy value. While Drag (1968) demonstrated that subjects were more willing to disclose highly intimate personal information after receiving disclosure from the experimenter, no evidence of actual reduction of topic intimacy value was cited. Similarly, Drag's results are relevant to a dyadic relationship while the present study was of a group interaction effect.

The present findings and Drag's results appear to mean that while subjects may be more willing to discuss



topics of a highly intimate nature after hearing disclosure of a similar nature, they do not necessarily change the intimacy value they place upon certain topics.

## II. ANCILLARY FINDINGS

All subjects increased their levels of achievement anxiety over the eight week period of the study regardless of the experimental condition they were in. This finding is presented as evidence of construct validity for the Alpert Haber (1954) Achievement Anxiety Test even though it was not the intent of the study to investigate this matter. Quite inadvertently, due to the availability of university students as subjects, the pre-test was held just following the Christmas examination period and the posttest just prior to the final spring exams. It is reasonable to assume that at the time of the pre-test that the test taking anxiety level would be at a low ebb in contrast to the posttest time just prior to final exams. The significant increase in test anxiety across all experimental conditions is thought to reflect the change in the subjects' academic environment.

The finding of the very significant correlation ( $r = .37$ ,  $p < .002$ ) between manifest anxiety and the debilitating anxiety sub-scale of the AAT provides further support for the use of the scale as a measure of handicapping anxiety in the test taking situation.





The acceptance of the significance of these results must be tempered with some degree of caution since they are of a subsidiary nature in a project not designed to study the effect of changes in academic environment upon achievement anxiety. Nevertheless, future research using any measure of achievement anxiety should explicitly describe the time of test administration in terms of its proximity to test taking situations for the subjects.

### III. CONCLUSIONS

The effects of sensitivity training upon participants is still a relatively unexplored area of group processes. Cognitive risk taking has been studied in a variety of laboratory situations in several countries, but not in more natural situations where the goal is not to produce the risky-shift phenomenon. The present study was an experimental examination of some effects of sensitivity training upon the participants.

A risky-shift was classically produced. Sensitivity training did not produce a risky-shift. It is suggested that a modification of the present study should be effected with the second measure of risk taking taking place during the first inclusion phase of group development rather than at the end of the sensitivity training sessions. It is hypothesized that the risky-shift is a reflection of developments in the inclusion phase of





of group formation rather than a "true cultural value."

The lack of significant findings concerning the reported relationship between defensiveness and risk taking attitude, or self-disclosure suggest that evaluation of the validity of the Marlowe-Crowne Social Desirability Scale as a measure of defensiveness would be in order.

Debilitating anxiety emerged as the better predictor of high cognitive risk taking. Sex differences were noted to be exerting their influence upon the relationship between manifest anxiety and risk taking attitude.

A major finding of the study is that sensitivity training produces an increase in the amount of self-disclosure to male and female friend targets for University undergraduates. This result suggests that if self-disclosure is the means to obtain a healthy personality and to maintain it then sensitivity training procedures have a place in the training programs of counselors. The relationship of self-disclosure rate to anxiety is still a confused picture. Sex differences were noted. Females who disclose greatly to male friend targets have high levels of facilitative achievement anxiety. No such significant relationship was found for males. Resolution of this problem must await further research.



While it has been demonstrated that sensitivity training can produce a significant increase in self-disclosure rate, the use of this procedure on an extensive basis in school or clinical setting to assist in the affective education of student or patient should await further delineation of its effect upon other variables. Sensitivity training did not have any effect upon achievement anxiety in the present project and did not produce a change in risk taking attitude. It remains to be determined what effects, if any, the procedure has upon many other personality and cognitive variables.

The obtainment of the significantly increased self-disclosure rate supports the position that this procedure should not be used by persons who do not have the therapeutic training nor the experience to cope with the ramifications of creating a willingness in a person to be more open to self-disclosure. Until the effects of sensitivity training procedures have been clearly delineated only well qualified, experienced persons should engage in its practice.

Since increased self-disclosure is one of the early goals of counseling, the study has relevance to the area of therapeutic psychology. It appears that the counselor may best accomplish his goal by being more open and self-disclosing himself, a suggestion in





conflict with historical methods of training counselors and psychotherapists, but in keeping with the known effects of modeling procedures.

On the basis of the findings from this study further research should be directed at determining the efficacy of sensitivity training as a method of producing behavioural changes prior to extensive institution as an integral part of classroom and counseling activity in the educational system. While this study has demonstrated the effect of sensitivity training upon the rate of self-disclosure, it remains to be determined what the optimal rate is for a healthy growing personality at various age ranges. Similarly, the effects of sensitivity training upon anxiety or defensiveness must also await the results of further research. Before the value of sensitivity training as a process, whereby the child in the classroom can be taught to become more aware of the emotional needs of others and of his own needs, is firmly established the possible side effects must be clearly delineated through research with samples of children of various age levels. It is not sufficient to endorse the use of sensitivity training as the most appropriate means for training teachers to become more aware of their students' needs, the processes operating within the structure of their classroom or staff structure; or, for training school counselors to develop similar





areas of awareness, without documentation to this effect. The present study represented a start in this direction by demonstrating that sensitivity training could produce the effect of increasing self-disclosure rate to specified targets in a sample of volunteer education undergraduate students.

#### IV. IMPLICATIONS FOR FUTURE RESEARCH

This project suggested several lines of further inquiry into the relationship between risk taking activity and sensitivity training which were not evident until its completion.

It is now hypothesized that only in the early formative inclusion phase of group development is self-disclosure a risky activity. After the group has been functioning for a period of time and moved into the trusting affection phase, self-disclosure may not be as risky an activity as formerly. It is therefore suggested that a project be undertaken to test this hypothesis. It would be necessary to demonstrate the existence and exact time of occurrence of the inclusion phase in group development as a first step. After the existence of the inclusion phase has been demonstrated, then the measure of risk taking could be taken. It is predicted that the measure of risk taking taken during the first inclusion phase of group development would be higher than prior to commencement of group activity and



also higher than any measure taken after the group had entered into the affection phase of group development. On the basis of the data from this study, sex differences and marital status should be taken into consideration in the planning of the design of the replicative study.

Further research should be undertaken in the area of the effects of personality variables and sex differences upon self-disclosure rate. The obtainment of a small but significant correlation ( $r = .32$ ,  $p < .04$ ) between facilitating anxiety and rate of self-disclosure to the male friend target by females suggest a project of this type. If facilitating anxiety is the motivating force to improve oneself and at the same time is related to high levels of self-disclosure then it follows that high degrees of facilitative anxiety must be present in order to make changes in one's personality towards greater health. If this can be demonstrated to be true then a valuable predictor of readiness for therapeutic change may be available. It remains for further research to demonstrate the validity of this speculation.

Similarly, a project could be designed to determine if married female subjects demonstrate the same pattern of high self-disclosure rate to same sexed friend being associated with high risk taking that married males did in this study. It is predicted that self-disclosure will remain associated with low risk taking for married females



as it is for single females, perhaps indicating a cultural effect upon self-disclosure rate.





## REFERENCES



## REFERENCES

- Adult Education Association Leadership Pamphlet. Training in human relations, Leadership Pamphlet, No. 16, Wash: 1959
- Alexander, C.N. Jr. Attitude as a scientific concept. Social Forces, 1966, 45, 278-281.
- Alker, H.A., & Kogan, N. Effects of norm oriented group discussion on individual risk taking and conservatism. Human Relations (1968)
- Allport, G.W. Patterns and growth in personality. New York: Holt Rinehart and Winston, 1961.
- Alpert, R., & Haber, R.N. Anxiety in academic achievement situations. Journal Abnormal & Social Psychology, 1960, 61, 207-215.
- Bach, G.R. Marathon group dynamics: II. Dimensions of helpfulness: therapeutic aggression. Psychological Reports, 1967, 20, 1147-1158.
- Baron, R.A. Authoritarianism, locus of control, and risk taking. Journal of Psychology, 1968, 68, 141-143.
- Batchelder, R.L. & Hardy, J.M. Using Sensitivity Training and the Laboratory Method. YMCA Association Press, New York, 1968.
- Bem, D.J., Wallach, M.A., & Kogan, N. Group decision making under risk of aversive consequences. Journal of Personality and Social Psychology, 1965, 1, 453-460.
- Bendig, A.W. The development of a short form of the manifest anxiety scale. Journal of Consulting Psychology, 1956, 20, 384.
- Benne, K.D. From polarization to paradox. In Bradfor, L.P., Gibb, J.R., Benne, K.D. (Eds.) New York: John Wiley & Sons Inc. 1964, 216-247. T-Group theory and laboratory methods.
- Bennis, W.G., & Shepard, H.A. A theory of group development. Human Relations, 1956, 4, 415-437.
- Bradford, L.P., Stock, D., & Horowitz, M. How to diagnose group problems, In Selected readings series one: Group development. National Training Laboratories Publication, Washington, D.C., 1961, 37-50.



- Brammer, L.M. & Shostrom, E.L. Therapeutic Psychology, 2nd. edition. Englewood Cliffs, N.J.: Prentice-Hall, 1968.
- Brown, R. Social Psychology. New York: Free Press of Glencoe, 1965.
- Borton, T. Reach, touch, and teach. Saturday Review, January 18, 1969, 56-70.
- Buss, A.H. A follow-up item analysis of the Taylor anxiety scale. Journal of Clinical Psychology, 1955, 11, 409-410.
- Byrd, R.E. Training in a non-group. Journal of Humanistic Psychology, 1967, 7, 18-27.
- Cartwright, D. Achieving change in people: some applications of group dynamics theory. Human Relations, 1951, 4, 381-393.
- Cartwright, D., & Zander, A. Group Dynamics: Research and Theory, New York: Row, Peterson & Co. 1960.
- Cattell, R.B. New concepts for measuring leadership in terms of group syntality. Human Relations, 1951, 4, 161-184
- Crowne, D.P., & Marlowe, D. A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 1960, 24, 349-354.
- Drag, L.R. Experimenter-subject interaction: a situational determinant of differential levels of self-disclosure. Unpublished Masters Thesis. University of Florida, 1968.
- Drotning, J.F. Sensitivity Training: some critical questions. Personnel Journal, 1966, 45, 604-606.
- English, H.B. & English, A.C. A comprehensive dictionary of psychological and psychoanalytical terms. New York: Longmans, Green 1958.
- Exline, R.W. Explorations in the process of person perception: visual interaction in relation to competition, sex, and need for affiliation. Journal of Personality, 1963, 31, 1-20.
- Eysenck, H.J. The psychology of politics. London: Routledge & Kegan Paul 1954. cited by Rim, Y., Social attitudes and risk taking. Human Relations, 1964, (b) 17, 259-265.





- Frankl, V.E. Man's Search for Meaning. New York: Washington Square Press, Inc., 1963.
- Friedman, R. Eye-contact and self-disclosure. Unpublished honors paper, University of Florida, 1968.
- Gazda, G.M. (ed.) Basic Approaches to Group Psychotherapy on Group Counseling. Charles C. Thomas, Springfield, 1968.
- Gendlin, E.T., & Beebe, J. III. An experimental approach to group therapy. Journal of Research and Development in Education, 1968, 1, 19-29.
- Gibb, C.A. Leadership. In Lindzey, G., (ed) Handbook of Social Psychology, Vol. 2. Massachusetts: Addison-Wesley, Reading, 1954, 877-920.
- Gunther, B. Sense Relaxation Below Your Mind, Collier Books, New York, 1968.
- Hinds, W.C. Individual and group decisions in gambling situations. Unpublished masters thesis, Massachusetts Institute of Technology, School of Industrial Management., 1962. Cited by Kogan, N., & Wallach, M.A. The risky-shift phenomenon in small decision-making groups: A test of the information-exchange hypothesis, Journal of Experimental and Social Psychology, 1967, 3, 75-84.
- Homans, G.C. The Human Group. New York: Harcourt, Brace, & World, 1950.
- Hoyt, D.P., and Magoon, T.M. A validation study of the Taylor manifest anxiety scale, Journal Clinical Psychology, 1954, 10, 357-361.
- Hoyt, G.C., & Stoner, J.A.F. Leadership and group decisions involving risk. Journal of Experimental Social Psychology, 1968, 4, 275-284.
- Izard, C.E. Personal growth through group experience. In Tomkins, S.S., & Izard, C.E., (eds.) Affect, Cognition and Personality, New York: Springer Publishing Co. Inc. 1965, 200-241.
- Jamieson, B.D. The "risky-shift" phenomenon with a heterogeneous sample. Psychological Reports, 1968, 23, 203-206.
- Jourard, S.M. Healthy personality and self-disclosure. Mental Hygiene, 1959, 43, 499-507.



Jourard, S.M. Self-disclosure patterns in British and American College females. Journal Social Psychology, 1961, 54, 315-320.

Jourard, S.M. The transparent self. Toronto: D. Van Nostrand Co. 1964.

Jourard, S.M. Project Replication: Experimenter-subject acquaintance and outcome in psychological research. Unpublished mimeographed personal communication July 1968 (a).

Jourard, S.M. Disclosing man to himself. Toronto: D. Van Nostrand Co. Inc. 1968 (b).

Jourard, S.M. & Lasakow, P. Some factors in self-disclosure Journal of Abnormal and Social Psychology, 1958, 56, 91-98.

Kogan, N., & Wallach, M.A. Risk taking: A study in cognition and personality. New York: Holt, Rinehart & Winston, 1964.

Kogan, N. & Wallach, M.A. Personality and situational determinants of judgemental confidence and extremity. British Journal of Social Clinical Psychology, 1965, 4, 25-34.

Kogan, N., & Wallach, M.A. Effects of physical separation of group members upon group risk taking. Human Relations, 1967(a), 20, 41-48.

Kogan, N., & Wallach, M.A. The risky-shift phenomenon in small decision making groups: a test of the information exchange hypothesis. Journal of Experimental Social Psychology, 1967(b), 3, 75-84.

Kogan, N., & Wallach, M.A. Group risk taking as a function of members anxiety and defensiveness levels. Journal of Personality, 1967(c), 35, 50-63.

Kogan, N., & Wallach, M.A. Risk taking In New Directions in Psychology III. Mandler, G., Mussen, P., Kogan, N., & Wallach, M.A. (eds.) New York: holt, Rinehart, & Winston, 1967(d).

Krumboltz, J.D. A behavioural approach to group counseling and therapy. Journal of Research and Development in Education, 1968, 1, 3-18.

Lakin, M., & Carson, R.C. A therapeutic vehicle in search of a theory of therapy. Journal of Applied Behavioral Science, 1966, 2, 27-40.





- Levitt, E.A. The relationship between abilities to express emotional meanings vocally and facially. In Davitz, J.R., (ed.) The communication of emotional meaning. New York: McGraw-Hill, 1964, 87-100.
- Levy, P.K. The ability to express and perceive vocal communications of feeling. In Davitz, J.R., (ed.) The communication of emotional meaning. New York: McGraw-Hill, 1964, 43-55.
- Lewin, K. Field theory and experiment in social psychology: concepts and methods. American Journal of Sociology, 1939, 44, 868-896.
- Lubin, B., & Zuckerman, M. Affective and perceptual-cognitive patterns in sensitivity training groups. Psychological Reports, 1967, 21, 365-376.
- Marquis, D.G. Individual responsibility and group decisions involving risk. Industrial Management Review, 1962, 3, 8-23, cited by Stoner, J.A.F. Risky and cautious shifts in group decisions: the influence of widely held values. Journal of Experimental Social Psychology, 1968, 4, 442-459.
- May, R. Psychology and the human dilemma. Toronto: Van Nostrand, 1967.
- Meiers, J. L. Origins and Development of Group Psychotherapy. Psychodrama Monographs No. 17, Beacon House, N.Y. 1946.
- Miles, M.B. Human relations training: processes and outcomes. Journal of Counseling Psychology, 1960, 7, 301-306.
- Miles, M.B. Human relations training: current status, In Selected Readings Series Five: Issues in training. Weschler, I.R., & Schein, E.H. (eds.) National training Laboratories Publications, Washington, D.C. 1962, 3-13.
- Murphy, M. Esalen where it's at. Psychology Today, December 1967, 34-39.
- Mussen, P. H., Conger, J.J. & Kagan, J. Child development and personality. (2nd ed.) New York: Harper 1963.
- Nordhøy, F. Group interaction in decision making under risk. Unpublished masters thesis. M.I.T. 1962, Cited by Teger, A.I. & Pruitt, D.G., Components of group risk taking, Journal of Experimental Social Psychology, 1967, 3, 189-205.
- Olmsted, M.S. The small group. New York: Random House, 1959.
- Ottoway, A.K.C. Learning through group experience. London: Routledge & Kegan, Paul, 1966.





- Pankove, E., & Kogan, N. Creative ability and risk-taking in elementary school children. Journal of Personality, 1968, 36, 420-439.
- Perls, F.S., Hefferline, R.F., & Goodman, P. Gestalt Therapy, New York, Julian Press, 1951.
- Plog, S.C. The disclosure of self in the United States and Germany. Journal of Social Psychology, 1965, 65, 193-203.
- Rettig, S. & Turoff, S.J. Exposure to group discussion and predicted ethical risk taking. Journal of Personality and Social Psychology, 1967, 7, 177-181.
- Rim, Y. Risk-taking and need for achievement. Acta Psychologica, 1963, 21, 108-115.
- Rim, Y. Personality and group decisions involving risk. Psychological Record, 1964(a), 14, 37-45.
- Rosenthal, R. The volunteer subject. Human Relations, 1965, 18, 389-406.
- Rogers, C.R. A theory of therapy, personality, and interpersonal relationships, as developed in the client-centered framework. In Koch, S., (ed.), Psychology: A study of a science. Vol. 3 Formulations of the person and the social context. New York: McGraw-Hill, 1959, 184-256.
- Rogers, C.R. The process of the basic encounter group. In Bugental, J.F.T. Challenges of humanistic psychology. New York: McGraw-Hill, 1967, 261-276.
- Rubin, I.M. Increased self-acceptance: A means of reducing prejudice. Journal of Personality and Social Psychology, 1967, 5, 233-238.
- Schein, E.H. & Bennis, W.G. Personal and organizational change through group methods. New York: John Wiley & Sons, 1965.
- Schutz, W.C. Firo: A three-dimensional Theory of Interpersonal Behavior. New York: Rinehart, 1958.
- Schutz, W.C. Joy. Expanding Human Awareness. Grove Press, New York, 1967.
- Slovic, P. Risk-taking in children: age and sex differences. Child Development, 1966, 37, 169-176.



- Stoner, J.A.F. Comparison of individual and group decisions involving risk. Unpublished masters thesis. M.I.T. 1961, Cited by, Teger, A.I. & Pruitt, D.G. Components of group risk taking. Journal of Experimental and Social Psychology, 1967, 3, 189-205.
- Stoner, J.A.F. Risky and cautious shifts in group decisions: the influence of widely held values. Journal of Experimental Social Psychology, 1968, 4, 442-459.
- Taft, R. The ability to judge people. Psychological Bulletin, 1955, 52, 1-21.
- Taylor, J. A. A personality scale of manifest anxiety. Journal of Abnormal and Social Psychology, 1953, 48, 285-290.
- Taylor, J.A. Drive theory and manifest anxiety. Psychological Bulletin, 1956, 53, 303-320.
- Teger, A.I. & Pruitt, D.G. Components of group risk taking. Journal of Experimental and Social Psychology, 1967, 3, 189-205.
- Thomas, H.F. An existential attitude in working with individuals and groups. In Bugental, J.F.T. (ed.), Challenges of Humanistic Psychology. New York: McGraw-Hill 1967, 227-232.
- Underwood, W.J. Evaluation of laboratory method training. Training Directors Journal, 1965, 19, 34-40.
- Van Kaam, A. The art of existential counseling. Wilkes-Barre, Pennsylvania: Dimension Books, 1966.
- Walker, H.M. & Lev, J. Statistical Inference, Holt, Rinehart and Winston, New York, 1953.
- Wallach, M.A. & Kogan, N. The roles of information, discussion and consensus in group risk taking. Journal of Experimental and Social Psychology, 1965, 1, 1-19.
- Wallach, M.A., Kogan, N. & Bem, D.J. Group influence on individual risk taking. Journal of Abnormal and Social Psychology, 1962, 65, 75-86.
- Wallach, M. A., Kogan, N. & Bem, D.J. Diffusion of responsibility and level of risk taking in groups. Journal of Abnormal and Social Psychology, 1964, 68, 263-274.





Wallach, M.A., Kogan, N & Burt, R.B. Can group members recognize the effects of group discussion upon risk taking. Journal of Experimental Social Psychology, 1965, 1, 379-395.

Wallach, M.A. & Wing, C.W., Jr. Is risk a value? Journal of Personality and Social Psychology, 1968, 9, 101-106.

Weckler, N. & Craig. Group sensitivity training, excerpt from Weckler and Craig, Sensitivity training in human relations with a group of deaf adults. Unpublished mimeographed paper, 1965. Personal communication.

Weschler, I.R., Massarik, F. & Tannenbaum, R. The self in process: A sensitivity training emphasis. In Weschler, I.R. & Schein, E.H. (eds.), Issues in training, selected readings series five, National Training Laboratories Publication, Washington, D.C., 1962, 33-46.

West, L.W. Patterns of self-disclosure for a sample of adolescents and the relationship of disclosure style to anxiety and psychological differentiations. Unpublished doctoral dissertation, University of Alberta, 1968.





## A P P E N D I X    A



INFORMATION SHEET

NAME \_\_\_\_\_ DATE \_\_\_\_\_

ADDRESS \_\_\_\_\_

BIRTHDATE \_\_\_\_\_  
                    day        month        year

Marital Status: Single \_\_\_\_\_

Married \_\_\_\_\_

Separated \_\_\_\_\_

Divorced \_\_\_\_\_

High School Attended \_\_\_\_\_

Do you speak another language? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes state \_\_\_\_\_

Have you ever participated in sensitivity training sessions,  
group process institutes, or self awareness training programs?

Yes \_\_\_\_\_

No \_\_\_\_\_

If Yes, where? \_\_\_\_\_

when? \_\_\_\_\_

trainers name \_\_\_\_\_

Have you ever participated in psychological research projects before?

Yes \_\_\_\_\_

No \_\_\_\_\_

If Yes, When? \_\_\_\_\_



## A P P E N D I X B





## ALPERT-HABER AAT SCALE

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## INSTRUCTIONS:

Read each statement and then rate each one as it applies to you personally. Indicate the degree to which the statement applies to you by circling the appropriate number.

EXAMPLE: Circling the number 5 means that the statement is very applicable to you.

Circling the number 1 means that the statement is not applicable to you.

1. Nervousness while taking an exam or test hinders me from doing well .  
Always-----Never  
5 4 3 2 1
2. I work most effectively under pressure, as when the task is very important.  
Always-----Never  
5 4 3 2 1
3. In a course where I have been doing poorly, my fear of a bad grade cuts down on my efficiency.  
Never-----Always  
1 2 3 4 5
4. When I am poorly prepared for an exam or test, I get upset, and do less well than even my restricted knowledge should allow.  
This never happens to me-----This practically always happens to me.  
1 2 3 4 5
5. The more important the examination, the less well I seem to do.  
Always-----Never  
5 4 3 2 1
6. While I may (or may not) be nervous before taking an exam, once I start, I seem to forget to be nervous.  
I always forget-----I am always nervous during an exam.  
5 4 3 2 1
7. During exams or tests, I block on questions to which I know the answers, even though I might remember them as soon as the exam is over.  
This always happens to me-----I never block on questions to which I know the answers.  
5 4 3 2 1
8. Nervousness while taking a test helps me do better.  
It never helps-----It often helps.  
1 2 3 4 5
9. When I start a test, nothing is able to distract me.  
This is always true of me-----This is not true of me.  
5 4 3 2 1



In courses in which the total grade is based mainly on one exam, I seem to do better than other people.  
Never-----Almost always.

1 2 3 4 5

I find that my mind goes blank at the beginning of an exam, and it takes me a few minutes before I can function.  
I almost always blank out at first-----I never blank out at first.

5 4 3 2 1

I look forward to exams.  
Never-----Always.

1 2 3 4 5

I am so tired from worrying about an exam, that I find I almost don't care how well I do by the time I start the test.  
I never feel this way-----I almost always feel this way.

1 2 3 4 5

Time pressure on an exam causes me to do worse than the rest of the group under similar conditions.  
Time pressure always seems to make me do worse on an exam than others-----Time pressure never seems to make me do worse on an exam than others.

5 4 3 2 1

Although "cramming" under pre-examinatin tension is not effective for most people, I find that if the need arises, I can learn material immediately before an exam, even under considerable pressue, and successfully retain it to use on the exam.  
I am always able to use the "crammed" material successfully-----I am never able to use the "crammed" material successfully.

5 4 3 2 1

I enjoy taking a difficult exam more than an easy one.  
Always-----Never.

5 4 3 2 1

I find myself reading exam questions without understanding them, and I must go back over them so that they will make sense.  
Never-----Almost always.

1 2 3 4 5

The more important the exam or test, the better I seem to do.  
This is true of me -----This is not true of me.

5 4 3 2 1

When I don't do well on a difficult item at the beginning of an exam, it tends to upset me so that I block on even easy questions later on.  
This never happens to me-----This almost always happens to me.

1 2 3 4 5



## A P P E N D I X C





## Personal Reaction Inventory

NAME \_\_\_\_\_ DATE \_\_\_\_\_

ADDRESS \_\_\_\_\_

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

- 
- |  |   |   |
|--|---|---|
| 1. Before voting I thoroughly investigate the qualifications of all candidates.                                      | T | F |
| 2. I never hesitate to go out of my way to help someone in trouble.  | T | F |
| 3. It is sometimes hard for me to go on with my work if I am not encouraged.   | T | F |
| 4. I have never intensely dislike anyone.  | T | F |
| 5. On occasion I have had doubts about my ability to succeed in life.  | T | F |
| 6. I sometimes feel resentful when I don't get my way.   | T | F |
| 7. I am always careful about my manner of dress.   | T | F |
| 8. My table manners at home are as good as when I eat out in a restaurant.   | T | F |
| 9. If I could get into a movie without paying and be sure I was not seen I would probably do it.                     | T | F |
| 10. On a few occasions, I have given up doing something because I thought too little of my ability.                  | T | F |
| 11. I like to gossip at times.   | T | F |
| 12. There have been times when I felt like rebelling against people in authority even though I knew they were right. | T | F |
| 13. No matter who I'm talking to, I'm always a good listener.  | T | F |
| 14. I can remember "playing sick" to get out of something.   | T | F |
| 15. There have been occasions when I took advantage of someone.  | T | F |



|     |   |   |   |
|-----|---|---|---|
| 16. | I'm always willing to admit it when I make a mistake.                                   | T | F |
| 17. | I always try to practice what I preach.   | T | F |
| 18. | I don't find it particularly difficult to get along with loud mouthed obnoxious people. | T | F |
| 19. | I sometimes try to get even rather than forgive and forget.                             | T | F |
| 20. | When I don't know something I don't at all mind admitting it.                           | T | F |
| 21. | I am always courteous, even to people who are disagreeable.                             | T | F |
| 22. | At time I have really insisted on having things my own way.                             | T | F |
| 23. | There have been occasions when I felt like smashing things.                             | T | F |
| 24. | I would never think of letting someone else be punished for my wrongdoings.             | T | F |
| 25. | I never resent being asked to return a favor.   | T | F |
| 26. | I have never been irked when people expressed ideas very different from my own.         | T | F |
| 27. | I never make a long trip without checking the safety of my car.                         | T | F |
| 28. | There have been times when I was quite jealous of the good fortune of others.           | T | F |
| 29. | I have almost never felt the urge to tell someone off.                                  | T | F |
| 30. | I am sometimes irritated by people who ask favors of me.                                | T | F |
| 31. | I have never felt that I was punished without cause.                                    | T | F |
| 32. | I sometimes think when people have a misfortune they only got what they deserved.       | T | F |
| 33. | I have never deliberately said something that hurt someone's feelings.                  | T | F |



## A P P E N D I X   D





BENDIG MA Scale

NAME \_\_\_\_\_ DATE \_\_\_\_\_

This scale consists of numbered statements. Read each one and decide whether it is true as applied to you or false as applied to you. If a statement is TRUE or MOSTLY TRUE, as applied to you, then circle T. If a statement is FALSE or MOSTLY FALSE, as applied to you, then circle F. Remember to give your own opinion of yourself. PLEASE ANSWER ALL QUESTIONS.

- 
- |  |   |   |
|--|---|---|
| 1. I believe I am no more nervous than most others.  | T | F |
| 2. I work under a great deal of tension.   | T | F |
| 3. I cannot keep my mind on one thing.   | T | F |
| 4. I am more sensitive than most other people.   | T | F |
| 5. I frequently find myself worrying about something.  | T | F |
| 6. I am usually calm and not easily upset.   | T | F |
| 7. I feel anxiety about something or someone almost all the time.                                  | T | F |
| 8. I am happy most of the time.  | T | F |
| 9. I have periods of such great restlessness that I cannot sit long in a chair.                    | T | F |
| 10. I have sometimes felt that difficulties were piling up so high that I could not overcome them. | T | F |
| 11. I find it hard to keep my mind on a task or job.   | T | F |
| 12. I am not unusually self-conscious.   | T | F |
| 13. I am inclined to take things hard.   | T | F |
| 14. Life is a strain for me much of the time.  | T | F |
| 15. At times I think I am no good at all.  | T | F |
| 16. I am certainly lacking in self-confidence.   | T | F |
| 17. I certainly feel useless at times.   | T | F |
| 18. I am a high-strung person.   | T | F |
| 19. I sometimes feel that I am about to go to pieces.  | T | F |
| 20. I shrink from facing a crisis or difficulty.   | T | F |



## A P P E N D I X    E



## THE SELF-DISCLOSURE QUESTIONNAIRE

People differ in the extent to which they let other people know them. We are seeking to investigate what people tell others about themselves.

Some of the things about yourself you will regard as more personal and private than others; people differ widely in what they consider appropriate to let others know, and what they consider is nobody's business but their own.

### INSTRUCTIONS

On the following pages there is a list of topics that pertain to you. You have been given a special answer-sheet. What we want you to do is indicate on the answer-sheet the degree to which you have let each of several people in your life know this information about you. You are to read each item on the questionnaire, and then indicate on the answer-sheet the extent that you have talked about each item to that person; that is, the extent to which you have made yourself known to that person.

Using the rating-scale described below to indicate the extent that you have talked to each person about each item.

- 0: Have told the other person nothing about this aspect of me.
- 1: Have talked in general terms about this item. The other person has only a general idea about this aspect of me.
- 2: Have talked in full and complete detail about this item to the other person. He knows me fully in this respect, and could describe me accurately.
- X: Have lied or misrepresented myself to the other person so that he has a false picture of me.





1. What I think and feel about religion; my personal religious views.
2. My personal opinions and feelings about other religious groups than my own; e.g., Protestants, Catholics, Jew, atheists.
3. My views on communism.
4. My views on the present government - the prime minister, government, policies, etc.
5. My views on the question of racial integration in schools, transportation, etc.
6. My personal views on drinking.
7. My personal views on sexual morality - how I feel that I and others ought to behave in sexual matters.
8. My personal standards of beauty and attractiveness in women - what I consider to be attractive in a woman.
9. The things that I regard as desirable for a man to be - what I look for in a man.
10. My feeling about how parents ought to deal with children.
11. My favorite foods, the ways I like food prepared, and my food dislikes.
12. My favorite beverages and the ones I don't like.
13. My likes and dislikes in music.
14. My favorite reading matter.
15. The kinds of movies that I like to see best; the TV shows that are my favorites.
16. My tastes in clothing.
17. The style of house, and the kinds of furnishings that I like best.
18. The kind of party, or social gathering that I like best, and the kind that bore me, or that I wouldn't enjoy.
19. My favorite ways of spending spare time, e.g., hunting, reading, cards, sports events, parties, dancing, etc.
20. What I would appreciate most for a present.
21. What I find to be the worst pressures and strains in my work.
22. What I find to be the most boring and unenjoyable aspects of my work.
23. What I enjoy most, and get the most satisfaction from in my present work.
24. What I feel are my shortcomings and handicaps that prevent me from working as I'd like to, or that prevents me from getting further ahead in my work.
25. What I feel are my special strong points and qualifications for my work.
26. How I feel that my work is appreciated by others (e.g., boss, fellow-workers, teacher, husband, etc.).
27. My ambitions and goals in my work.
28. My feelings about the salary or regards that I get for my work.
29. How I feel about the choice of career that I have made - whether or not I'm satisfied with it.
30. How I really feel about the people that I work for, or work with.



31. How much money I make at my work, or get as an allowance.
32. Whether or not I owe money; if so, how much.
33. Whom I owe money to at present; or who I have borrowed from in the past.
34. Whether or not I have savings, and the amount.
35. Whether or not others owe me money; the amount, and who owes it to me.
36. Whether or not I gamble; if so, the way I gamble, and the extent of it.
37. All of my present sources of income - wages, fees, allowance, dividends, etc.
38. My total financial worth, including property, savings, bonds, insurance, etc.
39. My most pressing need for money right now, e.g., outstanding bills, some major purchase that is desired or needed.
40. How I budget my money - the proportion that goes to necessities, luxuries, etc.
41. The aspects of my personality that I dislike, worry about, that I regard as a handicap to me.
42. What feelings, if any, that I have trouble expressing or controlling.
43. The facts of my present sex life - including knowledge of how I get sexual gratification; any problems that I might have; with who I have relations, if anybody.
44. Whether or not I feel that I am attractive to the opposite sex; my problems, if any, about getting favorable attention from the opposite sex.
45. Things in the past or present that I feel ashamed and guilty about.
46. The kinds of things that make me just furious.
47. What it takes to get me feeling real depressed or blue.
48. What it takes to get me real worried, anxious and afraid.
49. What it takes to hurt my feelings deeply.
50. The kinds of things that make me especially proud of myself, elated, full of self-esteem or self-respect.
51. My feelings about the appearance of my face- things I don't like, and things that I might like about my face and head - nose, eyes, hair, teeth, etc.
52. How I wish I looked; my ideals for overall appearance.
53. My feelings about different parts of my body - legs, hips, waist, weight, chest, or bust, etc.
54. Any problems and worries that I had with my appearance in the past.
55. Whether or not I now have any health problems. - e.g., trouble with sleep, digestion, female complaints, heart condition, allergies, headaches, piles, etc.
56. Whether or not I have any long-range worries or concerns about my health, e.g., cancer, ulcers, heart trouble.
57. My past record of illness and treatment.
58. Whether or not I now make a special effort to keep fit, healthy and attractive, e.g., calisthenics, diet.
59. My present physical measurements, e.g., height, weight, waist, etc.
60. My feelings about my adequacy in sexual behavior - whether or not I feel able to perform adequately in sex-relationships.





# ANSWER SHEET (SDQ)

NAME \_\_\_\_\_ DATE \_\_\_\_\_

SCALE:

0: Nothing, 1: General Terms, 2: Full and Complete, X: Misrepresented.

|     | MOTHER | FATHER | MALE<br>FRIEND | FEMALE<br>FRIEND | SPOUSE |  |     |  | MOTHER | FATHER | MALE<br>FRIEND | FEMALE<br>FRIEND | SPOUSE |  |
|-----|--------|--------|----------------|------------------|--------|--|-----|--|--------|--------|----------------|------------------|--------|--|
| 1.  |        |        |                |                  |        |  | 21. |  |        |        |                |                  |        |  |
| 2.  |        |        |                |                  |        |  | 22. |  |        |        |                |                  |        |  |
| 3.  |        |        |                |                  |        |  | 23. |  |        |        |                |                  |        |  |
| 4.  |        |        |                |                  |        |  | 24. |  |        |        |                |                  |        |  |
| 5.  |        |        |                |                  |        |  | 25. |  |        |        |                |                  |        |  |
| 6.  |        |        |                |                  |        |  | 26. |  |        |        |                |                  |        |  |
| 7.  |        |        |                |                  |        |  | 27. |  |        |        |                |                  |        |  |
| 8.  |        |        |                |                  |        |  | 28. |  |        |        |                |                  |        |  |
| 9.  |        |        |                |                  |        |  | 29. |  |        |        |                |                  |        |  |
| 10. |        |        |                |                  |        |  | 30. |  |        |        |                |                  |        |  |
| 11. |        |        |                |                  |        |  | 31. |  |        |        |                |                  |        |  |
| 12. |        |        |                |                  |        |  | 32. |  |        |        |                |                  |        |  |
| 13. |        |        |                |                  |        |  | 33. |  |        |        |                |                  |        |  |
| 14. |        |        |                |                  |        |  | 34. |  |        |        |                |                  |        |  |
| 15. |        |        |                |                  |        |  | 35. |  |        |        |                |                  |        |  |
| 16. |        |        |                |                  |        |  | 36. |  |        |        |                |                  |        |  |
| 17. |        |        |                |                  |        |  | 37. |  |        |        |                |                  |        |  |
| 18. |        |        |                |                  |        |  | 38. |  |        |        |                |                  |        |  |
| 19. |        |        |                |                  |        |  | 39. |  |        |        |                |                  |        |  |
| 20. |        |        |                |                  |        |  | 40. |  |        |        |                |                  |        |  |





# ANSWER SHEET (SDQ-2)

NAME \_\_\_\_\_ DATE \_\_\_\_\_

SCALE:

0: Nothing, 1: General Terms, 2: Full and Complete, X: Misrepresented.

|     | MOTHER | FATHER | MALE<br>FRIEND | FEMALE<br>FRIEND | SPOUSE |  |     | MOTHER | FATHER | MALE<br>FRIEND | FEMALE<br>FRIEND | SPOUSE |  |
|-----|--------|--------|----------------|------------------|--------|--|-----|--------|--------|----------------|------------------|--------|--|
| 41. |        |        |                |                  |        |  | 51. |        |        |                |                  |        |  |
| 42. |        |        |                |                  |        |  | 52. |        |        |                |                  |        |  |
| 43. |        |        |                |                  |        |  | 53. |        |        |                |                  |        |  |
| 44. |        |        |                |                  |        |  | 54. |        |        |                |                  |        |  |
| 45. |        |        |                |                  |        |  | 55. |        |        |                |                  |        |  |
| 46. |        |        |                |                  |        |  | 56. |        |        |                |                  |        |  |
| 47. |        |        |                |                  |        |  | 57. |        |        |                |                  |        |  |
| 48. |        |        |                |                  |        |  | 58. |        |        |                |                  |        |  |
| 49. |        |        |                |                  |        |  | 59. |        |        |                |                  |        |  |
| 50. |        |        |                |                  |        |  | 60. |        |        |                |                  |        |  |



## A P P E N D I X F



## SELF-DISCLOSURE QUESTIONS

NAME \_\_\_\_\_ DATE \_\_\_\_\_

### INSTRUCTIONS

A series of questions are addressed to you on the following pages. They are concerned with features of your life that are generally regarded as intimate and personal, the kind of thing people will confide to another person when they really want that other person to know them.

This is a study of patterns of self-disclosure. I want to explore people's willingness to make themselves known to others. I am interested in knowing the extent to which you are willing to let other participants in this project know your personal characteristics. The statements that you make will have no relation to what will take place in the following parts of the project.

These questionnaires will be seen only by the researcher and will be destroyed as soon as the data is recorded on the data sheets. The research is meaningless if you do not truthfully describe the material that you are willing to disclose and not willing to disclose.

The questionnaire calls for you to rank a number of items from 1 (LEAST WILLING) to 5 (MOST WILLING) in terms of your willingness to let others know your personal characteristics.

YOU ARE NOT TO ANSWER THE QUESTIONS, ONLY RANK YOUR WILLINGNESS TO DISCLOSE THIS INFORMATION.

### EXAMPLE

What teacher do you like best? 1 2 3 4 5

Circling 1 means that you are not at all willing to tell others who he is.

What teacher do you like best? 1 2 3 4 5

Circling 5 means that you are most willing to tell others who he is.

NO TIME LIMIT

PLEASE ANSWER ALL QUESTIONS.





1. What are your views on the way a husband and wife should live their marriage? 1 2 3 4 5
2. What are your usual ways of dealing with depression, anxiety and anger? 1 2 3 4 5
3. What are the actions you have most regretted doing in your life and why? 1 2 3 4 5
4. What are your personal religious views and the nature of your religious participation if any? 1 2 3 4 5
5. What are the ways in which you feel you are most maladjusted or immature? 1 2 3 4 5
6. What are your guiltiest secrets? 1 2 3 4 5
7. What are your personal views on politics, the prime minister, foreign and domestic policy? 1 2 3 4 5
8. What are the habits and reactions of yours which bother you at present? 1 2 3 4 5
9. What are the sources of strain and dissatisfaction in your marriage (or your relationship with the opposite sex)? 1 2 3 4 5
10. What are your favorite forms of erotic play and sexual lovemaking? 1 2 3 4 5
11. What are your hobbies; how do you like to spend your spare time? 1 2 3 4 5
12. What were the occasions in your life in which you were the happiest? 1 2 3 4 5
13. What are the aspects of your daily work that satisfy you and bother you? 1 2 3 4 5
14. What characteristics of yourself give you cause for pride and satisfaction? 1 2 3 4 5
15. Who are the persons in your life whom you most resent; why? 1 2 3 4 5
16. Who are the people with whom you have been sexually intimate. What were the circumstances of your relationship with each? 1 2 3 4 5
17. What are the unhappiest moments in your life; why? 1 2 3 4 5



- |     |  |   |   |   |   |   |
|-----|--|---|---|---|---|---|
| 18. | What are your preferences and dislikes in music?   | 1 | 2 | 3 | 4 | 5 |
| 19. | What are your personal goals for the next 10 years or so?                                    | 1 | 2 | 3 | 4 | 5 |
| 20. | What are the circumstances under which you become depressed and when your feelings are hurt? | 1 | 2 | 3 | 4 | 5 |
| 21. | What are your most common sexual fantasies and reveries?                                     | 1 | 2 | 3 | 4 | 5 |



## A P P E N D I X    G





## Choice Dilemmas Procedure

### OPINION QUESTIONNAIRE II

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

Instructions. On the following pages, you will find a series of situations that are likely to occur in everyday life. The central person in each situation is faced with a choice between two alternative courses of action, which we might call X and Y. Alternative X is more desirable and attractive than alternative Y, but the probability of attaining or achieving X is less than that of attaining or achieving Y.

For each situation on the following pages, you will be asked to indicate the minimum odds of success you would demand before recommending that the more attractive or desirable alternative, X, be chosen.

Read each situation carefully before giving your judgment. Try to place yourself in the position of the central person in each of the situations. There are twelve situations in all. Please do not omit any of them.

1. Mr. A. an electrical engineer, who is married and has one child, has been working for a large electronics corporation since graduating from college five years ago. He is assured of a lifetime job with a modest, though adequate salary and liberal pension benefits upon retirement. On the other hand, it is very unlikely that his salary will increase much before he retires. While attending a convention, Mr. A. is offered a job with a small, newly founded company which has a highly uncertain future. The new job would pay more to start and would offer the possibility of a share in the ownership if the company survived the competition of the larger firms.

Imagine that you are advising Mr. A. Listed below are several probabilities or odds of the new company's proving financially sound.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. A. to take the new job.

- The chances are 1 in 10 that the company will prove financially sound.
- The chances are 3 in 10 that the company will prove financially sound.
- The chances are 5 in 10 that the company will prove financially sound.
- The chances are 7 in 10 that the company will prove financially sound.
- The chances are 9 in 10 that the company will prove financially sound.
- Place a check here if you think Mr. A. should not take the new job no matter what the probabilities.

2. Mr. B. a 45 year-old accountant, has recently been informed by his physician that he has developed a severe heart ailment. The disease would be sufficiently serious to force Mr. B to change many of his strongest life habits - reducing his work load, drastically changing his diet, giving up favorite leisure-time pursuits. The physician suggests that a delicate medical operation could be attempted which, if successful, would completely relieve the heart condition. But its success could not be assured, and in fact, the operation might prove fatal.





Imagine that you are advising Mr. B. Listed below are several probabilities or odds that the operation will prove successful.

Please check the lowest probability that you would consider acceptable for the operation to be performed.

- Place a check here if you think Mr. B. should not have the operation no matter what the probabilities.
- The chances are 9 in 10 that the operation will be a success.
- The chances are 7 in 10 that the operation will be a success.
- The chances are 5 in 10 that the operation will be a success.
- The chances are 3 in 10 that the operation will be a success.
- The chances are 1 in 10 that the operation will be a success.

3. Mr. C. a married man with two children, has a steady job that pays him about \$6000 per year. He can easily afford the necessities of life, but few of the luxuries. Mr. C's father, who died recently, carried a \$4000 life insurance policy. Mr. C. would like to invest this money in stocks. He is well aware of the secure "blue-chip" stocks and bonds that would pay approximately 6% on his investment. On the other hand, Mr. C. has heard that the stocks of a relatively unknown Company X might double their present value if a new product currently in production is favorably received by the buying public. However, if the product is unfavorably received, the stocks would decline in value.

Imagine that you are advising Mr. C. Listed below are several probabilities or odds that Company X stocks will double their value.

Please check the lowest probability that you would consider acceptable for Mr. C. to invest in Company X Stocks.

- The chances are 1 in 10 that the stocks will double their value.
- The chances are 3 in 10 that the stocks will double their value.
- The chances are 5 in 10 that the stocks will double their value.
- The chances are 7 in 10 that the stocks will double their value.
- The chances are 9 in 10 that the stocks will double their value.
- Place a check here if you think Mr. C. should not invest in Company X stocks, no matter what the probabilities.

4. Mr. D. is the captain of College X's football team. College X is playing its traditional rival, College Y, in the final game of the season. The game is in its final seconds, and Mr. D's team, College X, is behind in the score. College X has time to run one more play. Mr. D. the captain, must decide whether it would be best to settle for a tie score with a play which would be almost certain to work or, on the other hand, should he try a more complicated and risky play which could bring victory if it succeeded, but defeat if not.

Imagine that you are advising Mr. D. Listed below are several probabilities or odds that the risky play will work.

Please check the lowest probability that you would consider acceptable for the risky play to be attempted.



- Place a check here if you think Mr. D. should not attempt the risky play no matter what the probabilities.
- The chances are 9 in 10 that the risky play will work.
- The chances are 7 in 10 that the risky play will work.
- The chances are 5 in 10 that the risky play will work.
- The chances are 3 in 10 that the risky play will work.
- The chances are 1 in 10 that the risky play will work.

5. Mr. E. is president of a light metals corporation in the United States. The corporation is quite prosperous, and has strongly considered the possibilities of business expansion by building an additional plant in a new location. The choice is between building another plant in the U.S., where there would be a moderate return on the initial investment, or building a plant in a foreign country. Lower labor costs and easy access to raw materials in that country would mean a much higher return on the initial investment. On the other hand, there is a history of political instability and revolution in the foreign country under consideration. In fact, the leader of a small minority party is committed to nationalizing, that is, taking over, all foreign investments.

Imagine that you are advising Mr. E. Listed below are several probabilities or odds of continued political stability in the foreign country under consideration.

Please check the lowest probability that you would consider acceptable for Mr. E's corporation to build a plant in that country.

- The chances are 1 in 10 that the foreign country will remain politically stable.
- The chances are 3 in 10 that the foreign country will remain politically stable.
- The chances are 5 in 10 that the foreign country will remain politically stable.
- The chances are 7 in 10 that the foreign country will remain politically stable.
- The chances are 9 in 10 that the foreign country will remain politically stable.
- Place a check here if you think Mr. E's corporation should not build a plant in the foreign country, no matter what the probabilities.

6. Mr. F. is currently a college senior who is very eager to pursue graduate study in chemistry leading to the Doctor of Philosophy degree. He has been accepted by both University X and University Y. University X has a world-wide reputation for excellence in chemistry. While a degree from University X would signify outstanding training in this field, the standards are so very rigorous that only a fraction of the degree candidates actually receive the degree. University Y, on the other hand, has much less of a reputation in chemistry, but almost everyone admitted is awarded the Doctor of Philosophy degree, though the degree has much less prestige than the corresponding degree from University X.

Imagine that you are advising Mr. F. Listed below are several probabilities or odds that Mr. F would be awarded a degree at University X, the one with the greater prestige.





Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. F. to enroll in University X rather than University Y.

- Place a check here if you think Mr. F. should not enroll in University X, no matter what the probabilities.
- The chances are 9 in 10 that Mr. F would receive a degree from University X.
- The chances are 7 in 10 that Mr. F would receive a degree from University X.
- The chances are 5 in 10 that Mr. F would receive a degree from University X.
- The chances are 3 in 10 that Mr. F would receive a degree from University X.
- The chances are 1 in 10 that Mr. F would receive a degree from University X.

7. Mr. G. a competent chess player, is participating in a national chess tournament. In an early match he draws the top-favored player in the tournament as his opponent. Mr. G has been given a relatively low ranking in view of his performance in previous tournaments. During the course of his play with the top-favored man, Mr. G notes the possibility of a deceptive though risky maneuver which might bring him a quick victory. At the same time, if the attempted maneuver should fail, Mr. G would be left in an exposed position and defeat would almost certainly follow.

Imagine that you are advising Mr. G. Listed below are several probabilities or odds that Mr. G's deceptive play would succeed.

Please check the lowest probability that you would consider acceptable for the risky play in question to be attempted.

- The chances are 1 in 10 that the play would succeed.
- The chances are 3 in 10 that the play would succeed.
- The chances are 5 in 10 that the play would succeed.
- The chances are 7 in 10 that the play would succeed.
- The chances are 9 in 10 that the play would succeed.
- Place a check here if you think Mr. G should not attempt the risky play, no matter what the probabilities.

8. Mr. H. a college senior, has studied the piano since childhood. He had won amateur prizes and given small recitals, suggesting that Mr. H has considerable musical talent. As graduation approaches, Mr. H has the choice of going to medical school to become a physician, a profession which would bring certain prestige and financial rewards; or entering a conservatory of music for advanced training with a well-known pianist. Mr. H realizes that even upon completion of his piano studies, which would take many more years and a lot of money, success as a concert pianist would not be assured.

Imagine that you are advising Mr. H. Listed below are several probabilities or odds that Mr. H would succeed as a concert pianist.

Please check the lowest probability that you would consider acceptable for Mr. H to continue with his musical training.





- Place a check here if you think Mr. H should not pursue his musical training, no matter what the probabilities.
- The chances are 9 in 10 that Mr. H would succeed as a concert pianist.
- The chances are 7 in 10 that Mr. H would succeed as a concert pianist.
- The chances are 5 in 10 that Mr. H would succeed as a concert pianist.
- The chances are 3 in 10 that Mr. H would succeed as a concert pianist.
- The chances are 1 in 10 that Mr. H would succeed as a concert pianist.

9. Mr. J is an American captured by the enemy in World War II and placed in a prisoner-of-war camp. Conditions in the camp are quite bad, with long hours of hard physical labor and a barely sufficient diet. After spending several months in this camp, Mr. J notes the possibility of escape by concealing himself in a supply truck that shuttles in and out of the camp. Of course, there is no guarantee that the escape would prove successful. Recapture by the enemy could well mean execution.

Imagine that you are advising Mr. J. Listed below are several probabilities or odds of a successful escape from the prisoner-of-war camp.

Please check the lowest probability that you would consider acceptable for an escape to be attempted.

- The chances are 1 in 10 that the escape would succeed.
- The chances are 3 in 10 that the escape would succeed.
- The chances are 5 in 10 that the escape would succeed.
- The chances are 7 in 10 that the escape would succeed.
- The chances are 9 in 10 that the escape would succeed.
- Place a check here if you think Mr. J should not try to escape no matter what the probabilities.

10. Mr. K. is a successful businessman who has participated in a number of civic activities of considerable value to the community. Mr. K has been approached by the leaders of his political party as a possible congressional candidate in the next election. Mr. K's party is a minority party in the district, though the party has won occasional elections in the past. Mr. K would like to hold political office, but to do so would involve a serious financial sacrifice, since the party has insufficient campaign funds. He would also have to endure the attacks of his political opponents in a hot campaign.

Imagine that you are advising Mr. K. Listed below are several probabilities or odds of Mr. K's winning the election in his district.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. K to run for political office.

- Place a check here if you think Mr. K should not run for political office no matter what the probabilities.
- The chances are 9 in 10 that Mr. K would win the election.
- The chances are 7 in 10 that Mr. K would win the election.
- The chances are 5 in 10 that Mr. K would win the election.
- The chances are 3 in 10 that Mr. K would win the election.
- The chances are 1 in 10 that Mr. K would win the election.



11. Mr. L. a married 30 year old research physicist, has been given a five year appointment by a major university laboratory. As he contemplates the next five years, he realizes that he might work on a difficult, long-term problem which, if a solution could be found, would resolve basic scientific issues in the field and bring high scientific honors. If no solution were found, however, Mr. L. would have little to show for his five years in the laboratory, and this would make it hard for him to get a good job afterwards. On the other hand, he could, as most of his professional associates are doing, work on a series of short-term problems where solutions would be easier to find, but where the problems are of lesser scientific importance.

Imagine that you are advising Mr. L. Listed below are several probabilities or odds that a solution would be found to the difficult, long-term problem that Mr. L. has in mind.

Please check the lowest probability that you would consider acceptable to make it worthwhile for Mr. L to work on the more difficult long-term problem.

- The chances are 1 in 10 that Mr. L would solve the long-term problem.
- The chances are 3 in 10 that Mr. L would solve the long-term problem.
- The chances are 5 in 10 that Mr. L would solve the long-term problem.
- The chances are 7 in 10 that Mr. L would solve the long-term problem.
- The chances are 9 in 10 that Mr. L would solve the long-term problem.
- Place a check here if you think Mr. L should not choose the long-term difficult problem, no matter what the probabilities.

12. Mr. M is contemplating marriage to Miss T. a girl whom he has known for a little more than a year. Recently, however, a number of arguments have occurred between them, suggesting some sharp differences of opinion in the way each views certain matters. Indeed, they decide to seek professional advice from a marriage counselor as to whether it would be wise for them to marry. On the basis of these meetings with a marriage counselor, they realize that a happy marriage, while possible, would not be assured.

Imagine that you are advising Mr. M and Miss T. Listed below are several probabilities or odds that their marriage would prove to be a happy and successful one.

Please check the lowest probability that you would consider acceptable for Mr. M and Miss T to get married.

- Place a check here if you think Mr. M and Miss T should not marry, no matter what the probabilities.
- The chances are 9 in 10 that the marriage would be happy and successful.
- The chances are 7 in 10 that the marriage would be happy and successful.
- The chances are 5 in 10 that the marriage would be happy and successful.
- The chances are 3 in 10 that the marriage would be happy and successful.
- The chances are 1 in 10 that the marriage would be happy and successful.





A P P E N D I X    H



ANALYSIS VARIANCE RESULTS : TEST of HOMOGENEITY of

VARIANCE of TOTAL SAMPLE on PRE-TEST DATA

| TEST VARIABLE   | GROUP A |       | GROUP B |       | GROUP C |       | TOTAL SAMPLE |       | F    | P -  |
|-----------------|---------|-------|---------|-------|---------|-------|--------------|-------|------|------|
|                 | MEAN    | S.D.  | MEAN    | S.D.  | MEAN    | S.D.  | MEAN         | S.D.  |      |      |
| Age             | 22.00   | 4.45  | 22.96   | 4.45  | 21.57   | 5.90  | 22.21        | 4.78  | 0.50 | 0.61 |
| Manifest        |         |       |         |       |         |       |              |       |      |      |
| Anxiety         | 9.00    | 3.80  | 9.00    | 4.86  | 9.43    | 5.41  | 9.13         | 4.59  | 0.06 | 0.94 |
| Facilitating    |         |       |         |       |         |       |              |       |      |      |
| Anxiety         | 26.92   | 3.73  | 26.76   | 4.38  | 27.71   | 5.15  | 27.10        | 4.33  | 0.30 | 0.74 |
| Debilitating    |         |       |         |       |         |       |              |       |      |      |
| Anxiety         | 25.73   | 6.67  | 27.32   | 4.34  | 27.38   | 5.65  | 26.76        | 5.59  | 0.68 | 0.51 |
| Defensiveness   | 12.96   | 4.84  | 15.08   | 3.84  | 15.19   | 5.17  | 14.34        | 4.64  | 0.35 | 0.17 |
| Self-Disclosure |         |       |         |       |         |       |              |       |      |      |
| Total           | 263.43  | 66.97 | 257.88  | 58.26 | 264.25  | 76.89 | 261.75       | 73.53 | 0.05 | 0.95 |
| Self-Disclosure |         |       |         |       |         |       |              |       |      |      |
| Male Friend     | 64.92   | 18.66 | 63.80   | 23.47 | 62.76   | 27.11 | 63.90        | 22.57 | 0.05 | 0.95 |
| Self-Disclosure |         |       |         |       |         |       |              |       |      |      |
| Female Friend   | 67.42   | 22.12 | 68.44   | 21.39 | 66.81   | 19.94 | 67.60        | 20.81 | 0.04 | 0.96 |
| Low Intimacy    | 31.54   | 3.57  | 31.88   | 3.10  | 31.04   | 2.75  | 31.51        | 3.14  | 0.39 | 0.68 |
| Moderate        |         |       |         |       |         |       |              |       |      |      |
| Intimacy        | 26.58   | 5.38  | 26.40   | 5.48  | 25.52   | 5.09  | 26.21        | 5.24  | 0.25 | 0.78 |
| High Intimacy   | 16.81   | 6.20  | 17.80   | 7.10  | 17.95   | 6.21  | 17.49        | 6.41  | 0.22 | 0.80 |
| Total Intimacy  | 71.08   | 18.48 | 68.08   | 22.61 | 69.76   | 18.90 | 69.65        | 19.75 | 0.14 | 0.87 |
| Choice Dilemmas |         |       |         |       |         |       |              |       |      |      |
| Total           | 72.54   | 15.68 | 66.56   | 18.37 | 69.19   | 13.32 | 69.49        | 15.92 | 0.89 | 0.42 |
| Conservative    |         |       |         |       |         |       |              |       |      |      |
| Items 5 & 12    | 15.12   | 3.56  | 14.88   | 2.80  | 14.67   | 3.14  | 14.90        | 3.13  | 0.12 | 0.89 |
| Risk - 10       | 57.42   | 14.87 | 55.68   | 12.63 | 54.53   | 11.92 | 55.97        | 13.07 | 0.29 | 0.75 |



A P P E N D I X    I





## MANUAL "A"

## RISKY-SHIFT PROCEDURE



## PROCEDURE FOR THE PRODUCTION OF THE RISKY-SHIFT PHENOMENON

Each subject who has been assigned to the risky-shift treatment condition will be advised to report to one of three rooms. There will be 10 subjects assigned to each room. They will have already completed the pretreatment test battery when they arrive and therefore will have had their first exposure to the Choice Dilemmas Procedure (CDP) as the last test in the battery.

### INSTRUCTIONS TO EXPERIMENTER

When all 10 subjects have been seated, in the chairs which were prearranged in a circle, pass out the questionnaires and then SAY:

"The questionnaire you now have in front of you is the same one which you just finished taking. We have had each of you fill out the questionnaire so that you would become familiar with all of the situations it contains. What we are really interested in is having you discuss each of the situations as a group. Let me now describe the purpose of these discussions. We are trying to develop a set of case materials for a human relations course. This means that we would like to develop situations for which people are likely to hold many different points of view. We want to see whether the situations we constructed will generate a diversity of opinion, so your discussions will



tell us how well the different situations are working out for our purposes. You will have five minutes to discuss each situation. I am not going to participate in the discussion although I will be here to answer any procedural questions which may arise. All right, let's begin with the first item. Go right ahead."

Allow the discussion to go on about five minutes. The experimenter will seat himself off to the side and make notes so as to appear that he is studying the discussion procedure. Interrupt the group discussion as naturally as possible when the five minutes are about up, and SAY:

"All right. That was a good discussion. Several different points of view were expressed. For some of you, the discussion may have raised issues that you had overlooked when filling out the questionnaire individually. Now, we would like to find out whether the discussion influenced your judgement in any way. When making your decision now, don't feel bound by what you did when filling out the questionnaire the first time. We're not interested in your prior opinion, but rather in just how you feel about the situation now. If you still feel the same way, that's quite all right, but we should like you to consider each situation in the light of the discussion. As I told you before, we're interested in seeing how much diversity of opinion's is generated by each situation. Obviously, the expression of such diversity should have some impact on





everyone's personal opinions. All right, go ahead and make your decision for the first situation --the one you just discussed."

After all subjects have made their decision and recorded it on the booklet SAY:

"All right. Discuss the next situation. You will have about five minutes."

After approximately five minutes have lapsed stop the discussion at a natural break in the conversation and request that each subject arrive at an individual decision concerning the situation and record his choice, by SAYING:

"That was a good discussion. All right, go ahead and make your decision for the second situation - the one you have just finished discussing."

Then request that the subjects discuss the next item, and, after approximately five minutes of discussion, again ask them to arrive at individual decisions. Repeat this procedure until all 12 of the situations have been discussed.

DO NOT enter into the discussion of the situations with the subjects. It is permissible to repeat the above instructions if necessary. Collect all of the questionnaires and make sure that each subject has written his or her name at the top of the front page. Tell all subjects that they will be advised as to when they are to come back for the final part of the research. Thank them for their cooperation.



A P P E N D I X J



MANUAL "B"

SENSITIVITY TRAINING  
FACILITATOR MANUAL





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## SENSITIVITY TRAINING FACILITATOR MANUAL

Man does not live in isolation, but grows and develops through the media of his interpersonal interactions. Everyone is potentially capable of finding real personal and positive meaning to his existence. A primary goal of life is the attainment of satisfaction to current needs and in allowing others to obtain satisfaction for their needs.

The implicit goal of sensitivity training seems to be to experience life fully in the here-and-now of relationships with others. The focus of this study, as it relates to small group behaviour, is upon sensitivity training as a means of personal self-enhancement particularly as a function of self-disclosure. Self-disclosure (Jourard, 1959) is the process of letting other people know what you think, feel and want. Through self-disclosure one reveals to himself and to others just exactly who, what, and where he is.

### Sensitivity Training Group Defined

For the purpose of this study, a sensitivity training group will be defined as consisting of a number of individuals interacting with each other in a climate of trust and acceptance so as to obtain personal feedback in an effort to develop congruence between self-perception and perception of self as reported by others, with the goal of greater personal enhancement.



## Sensitivity Training

Sensitivity training is not a conventional educational or therapeutic system. It contains elements of both systems, being a unique form of laboratory training which originated at Bethel Maine in about 1947. Due to its newness, laboratory training and especially the sensitivity training approach has not yet firmly established its theoretical constructs or methodology.

## Goals of Sensitivity Training

Laboratory training and sensitivity training are based on the theory that individuals can best gain understandings and skills from learning situations in which they have an opportunity to participate in groups which are struggling with interpersonal problems. The intensive experience, arising out of the techniques used, leads to improved understanding of one's self and one's relationships with others.

Schein and Bennis (1965) in discussing the goals of the training laboratory method describe the goal of sensitivity training as learning about:

1. Self: the delegates' own behavior in groups and the impact which their own behavior has on other members.
2. Others. The behavior of others in a group and the impact which their behavior has on them....
5. The learning process. How to learn from their experience ("learning how to learn"). [p. 13]





It is a basic assumption of the procedure that personal experience must precede intellectual understanding. Both aspects of the process must complement each other or optimal learning which is personally useful and generalizable cannot take place.

### Sensitivity Training Techniques

Sensitivity training procedures according to Weschler, Massarik, Tannebaum (1962) and Weckler and Craig (1965) focuses upon the strengthening of the individual in his desire to experience events and people more fully. Weckler and Craig describe the situation as consisting:

...primarily of setting up an unstructured group situation in which the leader fails to conform to the expected role of "leader" or "teacher". As a member expresses himself, the other members are encouraged to express their reactions. Hence, through feedback, each participant discovers the impact he makes on others.

The facilitator-trainer, by personally risking openness through self-disclosure, provides a model for the other group members to emulate.

### Feedback

The group and the individual participants can mobilize resources towards intelligent action in solving its conflicts only when a method of consensual validation (feedback) is available. People, and therefore groups need feedback systems to assist in guiding them towards a selected goal. Such a system calls for the collection of information about



the discrepancy between what a group or individual wants to do and what it is doing, verbalizing the information obtained, making decisions for change, trying out the new behaviour and receiving verbal comment about its success or failure. A necessary prerequisite for the efficient functioning of this type of feedback system is the establishment of a climate of trust and acceptance of individual differences. The group facilitator must, by virtue of his own attitude and behaviour, work towards establishing such a group environment. He must initiate the data collection, the reporting and the trying out of new behaviour; but, also must allow and encourage other group members to do the same. An effective group permits its members to behave in accordance with their own personalities and needs as well as in regard to the maintenance needs of the group.

### The Here-and- Now Focus Upon Being

The focus upon the here-and-now experience of the individuals participating in the group is perhaps the main distinguishing feature which delineates sensitivity training as a technique from the other established and contemporary forms of counseling and psychotherapy.

The here-and-now focus simply means that the common experienced behaviour of the participants engaged in the training program provides the data for analysis, synthesis, and action. An effort is made to transform any there-and-then



information brought up by a participant into here-and-now data so that all can share it as public, first hand, direct experience. This approach deals with aspects of the past and future only as they can be related to the present tasks of the individuals in the group.

The aim is to help a person to more accurately perceive and understand his present experiential world and to develop self-reliance (individuality) by emphasis upon the here-and-now.

As the group learns to focus on the here-and-now it will be able to use this reference point to clarify the past and possibly the future experiences as they relate to the members' outside of group experiences. The goal of the here-and-now focus being to assist the individual to develop an openness to himself and to others without preconceived notions of cause and effect.

The responsibility of the group facilitator is to train the participants to ask the questions, What is happening?, Where are we now?, How do I feel?, What does it mean to me, to you?, etc., and to stay away from asking Why? since this question leads to defensiveness and will be naturally answered when what, when, and how are answered.





## The Role of the Facilitator

The role of the facilitator is "being himself." He must act upon his own feelings and experience as a person so that, by virtue of his exposure of personal assets and frailties, the group members will accept this as meaning that such behaviour is not only accepted but is encouraged. The facilitator must communicate the attitude that he values his own individuality just as he similarly values each participants right to individuality. He must also communicate through his actions that this is a responsible freedom to be oneself. The responsibility is related to the concept that in being free one must not endanger another person's freedom.

This facilitator attitude is described by Izard (1965) as a modification of the Rogerian concept of positive regard. The facilitator will do well to remember Izard's conceptualization of this attitude:

I want to get to know you as a person and I am confident that I will come to like you if we can share experiences and get to know each other well. My experience has taught me that mutual sharing of personal perceptions and feelings leads to deep and meaningful relationships between people..., we must realize that we are human and we are imperfect....Positive regard for the unique you must await the unfolding of the real you. I cannot actually like you as a person until I know you as a person--the real you. [p. 205]

This is the attitude that the facilitator must meaningfully convey to the group. Similarly the facilitators' behaviour must communicate an empathetic understanding that:



I am deeply interested in you and your personal world, in coming as close as I can to perceiving and feeling as you do....This does not mean that I want to make you over in my own image....I value separateness and individuality for you and for me. ...my highest value in relation to people is that a person be capable himself of functioning as a separate and integral human being on the basis of his own perceptions and feelings. [Izard, 1965; p.207]

The facilitator in communicating positive regard, empathy, and congruency, acts as a model designed to produce a similar expression in the group members. All of which is designed to produce a willingness in each individual to risk being himself. Byrd (1967) complements this by providing nine ground rules for facilitators:

1. Self-actualizing rule: The...trainer expresses his autonomy, reactivity, and openness....
2. The provisional-try rule: the...trainer invents, explores and does creative thinking....a trainer... must be risking "mistakes." He must try new behaviour....
3. The Open Agenda rule: The...trainer communicates by words but more importantly through his behaviour, his own personal growth goals....
4. Members initiate rule: People "become" best when they initiate their own responses to cues that come from within....
5. The Common Language rule: The language of the... trainer must also be the language of the participants....
6. The Involvement rule:...demands trainer involvement from the beginning...he acts on his personal goals in a way commensurate with the situation....
7. Leverage rule: The...trainer uses personal initiative as leverage....
8. The Norm Testing rule: The...trainer is concerned about coercive group norms that tend to form from the outset....The rule for the trainer is to test the usefulness of the norms he perceives as repressive to him as well as to the group....He resists when the group presses him for leadership to a goal leading nowhere....
9. The Spontaneous Response rule:...The trainer who makes a delayed response induces caution in the participants. [pp.23-25]

Gendlin and Beebe (1968) in providing ten ground rules for





group sessions outline a rationale for the facilitator to follow:

1. Everyone who is here belongs here just because he is here, and for no other reason....
2. For each person what is true is determined by what is in him, what he directly feels and finds making sense in himself, and the way he lives inside himself....
3. Our first purpose is to make contact with each other. Everything else we might want or need comes second....
4. We try to be as honest as possible and to express ourselves as we really are and really feel--just as much as we can....
5. We listen for the person inside living and feeling....
6. We listen to everyone....
7. The group leader is responsible for two things only: he protects the belonging of every member, and he protects their being heard if this is getting lost....
8. Realism: If we know things are a certain way, we do not pretend they are not that way....
9. What we say here is "confidential:" no one will repeat anything said here outside the group, unless it concerns only himself. This applies not just to obviously private things, but to everything. After all, if the individual concerned wants others to know something, he can always tell them himself....
10. Decisions made by the group need everyone taking part in some way. [pp. 24-28]

It is realized that if a facilitator was to memorize these rules and to rigidly act upon them, that the situation created could and would probably be very artificial and automated. This would in effect be contrary to the goals of sensitivity training. The purpose of the rules is to provide an operational framework within which the facilitator concentrates upon being open to his own experience and to the experience of the other group members. While it is not advisable to didactically present these "rules" to the group it is possible to use them as a conflictual situation arises. For example: when the problem of





confidentiality is brought up in the group discussion; the rule concerning confidentiality can be presented for consideration, not as a rule but as a suggestion to be considered.

The same thing applies to the use of specific group exercises. They should not be used as a routine but should be offered to the group in an attempt to overcome specific problems. The introduction of an exercise that is not relevant to the situation only produces mystical caution on the part of the participants.

The role of the facilitator consists of:

1. providing a model of authentic openness with his self feeling being congruent with his verbal self-disclosure;
2. focussing attention upon the experiential here-and-now;
3. working to establish a group environment of trust and acceptance and;
4. protecting the right of each and every member to belong to the group and to be heard if this is getting lost.



## REFERENCES

- Byrd, R.E. Training in a non-group. Journal of Humanistic Psychology, 1967, 7, 18-27.
- Gendlin, N.T., & Beebe, J. III. An experimental approach to group therapy. Journal of Research and Development in Education. 1968, 1, 19-29.
- Izard, C.E. Personal growth through group experience. In Tomkins, S.S., & Izard, C.E. (eds.) Affect, cognition and personality, New York: Springer, 1965, 200-241.
- Jourard, S.M. Healthy personality and self-disclosure. Mental Hygiene, 1959, 43, 499-507.
- Schein, E.H. & Bennis, W.G. Personal and organizational change through group methods, New York: John Wiley & Sons, 1965.
- Weckler, N. & Craig. Group sensitivity training, excerpt from Weckler and Craig, Sensitivity training in human relations with a group of deaf adults. Unpublished mimeographed paper, 1965. Personal communication.
- Weschler, I.R., Massarik, F., & Tannenbaum, R. The self in process: A sensitivity training exphasis. In Weschler, I.R. & Schein, E.H. (eds.), Issues in training, selected readings series five. National Training Laboratories Publication, 1962, 33-46.







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